

Islamic Republic of Iran

Forest, Rangeland and Watershed Management Organization (FRWO)

Natural Resources and Watershed Management General Office (NRWGO)

The Participatory Forest and Rangeland
Management Project
in Chaharmahal-va-Bakhtiari Province
Islamic Republic of Iran

Project Completion Report

February, 2017

Japan International Cooperation Agency (JICA)

Japan Overseas Forestry Consultants Association

Japan Forest Technology Association

Sanyu Consultants Inc.

GE
JR
17-015

Japan International
Cooperation Agency
(JICA)

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Watershed Management Organization (FRWO)
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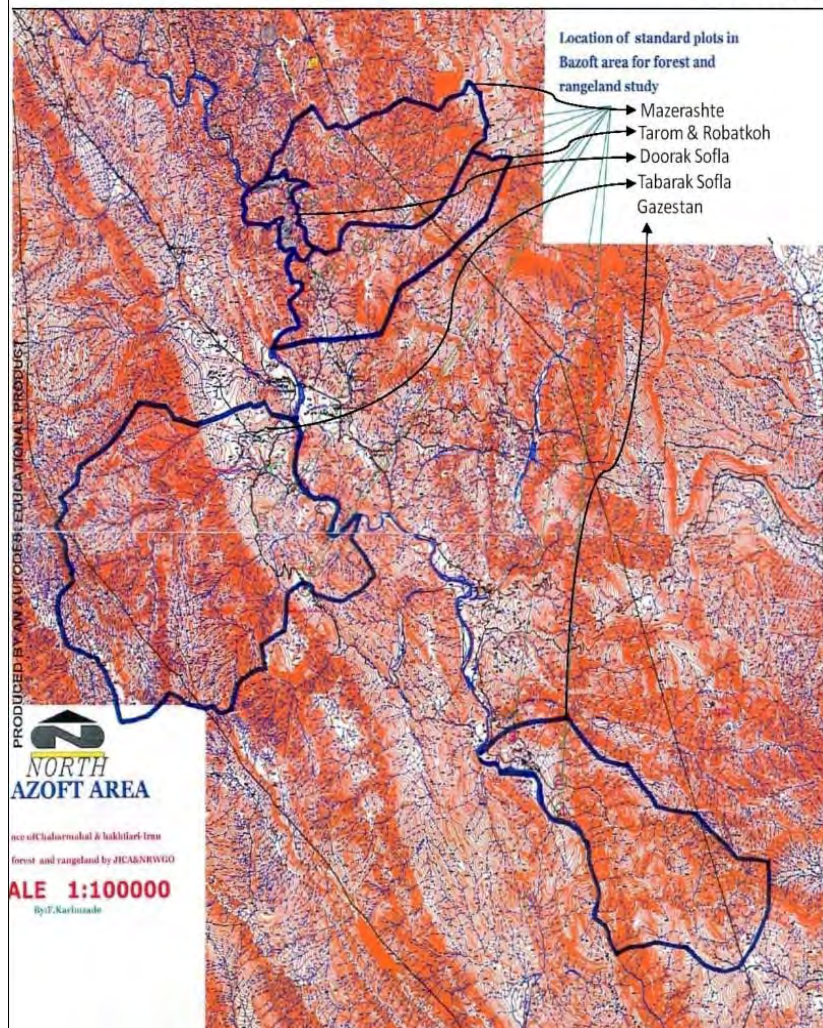
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LOCATION MAP



5 Pilot Village in Bazoft Area for JICA Project

Dec . 2010



PHOTOS

Project Management: JCC, evaluation, training in Japan, etc.



1st JCC: Concept and direction of the project approved (August 2010, Shahrekord)



Bazoft guesthouse construction: Materials for the construction were purchased by the project; the guesthouse was constructed by NRWGO (June 2011, Telurd town in Bazoft area)



Mid-term Review Mission: Interview for women's sewing group (October, 2012: Durak Sofla village in Bazoft area)



International seminar on participatory project: Various ideas were exchanged with international cooperation projects (October 2014, Shahrekord)



Final evaluation survey: Interviews with local people at a rose garden in Tabarak Sofla village (January 2015, Tabarak Sofla village in Bazoft area)



8th JCC: Approval of the PDM for an extended phase of the Project, etc. (April 2015, Shahrekord)



Training in Japan: Courtesy call to the Director of Private Forest Management (January 2014, Japan Forestry Agency)



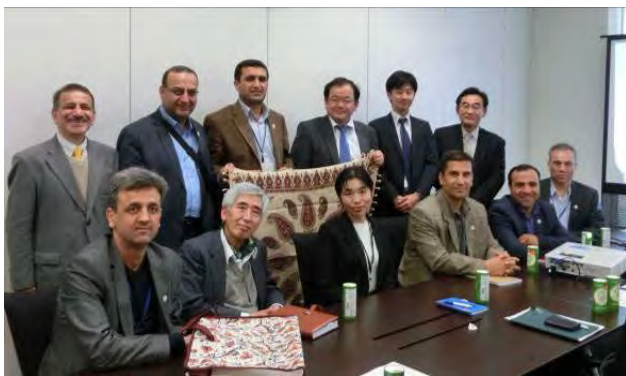
Training in Japan: Exchanging ideas on a forest conservation project implemented in Aya town with the town government, NPOs and the people of the town (January 2014, Aya town in Miyazaki prefecture)



Training in Japan: Visiting the Natural Environment Conservation Center in Kanagawa prefecture (August 2014, Atsugi city in Kanagawa prefecture)



Training in Japan: Visiting a laurel forest of UNESCO Eco-Park in Aya town (August 2014, Aya town in Miyazaki prefecture)



Training in Japan: Courtesy call at the JICA Head Office (April 2015, JICA Head office)



Training in Japan: Visiting the forcing house for wild vegetables (April 2015, Sakae village in Nagano prefecture)

Activities of output1: Basic survey, drafting of CD strategy, training for staff



Basic survey: Distant view of Bazoft area (September 2010, Faryak village in Bazoft area)



Basic survey: Fodder grass is not abundant in autumn and oak leaves trees are used for fodder (November 2010, Mazarashte village in Bazoft area)



Basic survey: A socio-economic survey for ten selected villages in Bazoft area (September 2010, Fariak village in Bazoft area)



Training for NRWGO staff: Training on PRA (October 2010, Shahrekord)



Basic survey: A herd of sheep moving from Khuzestan province (April 2013, near the provincial border in Bazoft area)



Training for NRWGO staff: Training on pests and disease control (November 2011, Agriculture Training Center in Chaleshtor town)



Training for NRWGO staff: Training delivered for local NRWGO staff on PCM and problem analysis on protected area (May 2012, Farsan town)



Training for NRWGO staff: Field work in Bazoft area conducted in the forest management course (October 2012, Bazoft area)



Training for NRWGO staff: It is explained that the bent root on the slope indicates landslides in the soil erosion and prevention course (October 2012, Tabarak Sofla village in Bazoft area).



Training for NRWGO staff: Studying the bio-gas production devices at the UNDP/World Bank/ GEF project site in Birjand, South Khorasan province (October 2012, Birjand in South Khorasan province)



CD strategy seminar: JCC members and the Directors General of NRWGO of the provinces lying in the Karoon watershed attended the seminar and frankly exchanged views (May 2013, Shahrekord).



Training for NRWGO staff: A lecture is given on the NTFPs (medicinal plants, etc.) (September 2013, Shahrekord).



Training for NRWGO staff: Introduction of new ideas and methods for natural resource management (October 2013, Shahrekord)



Training for NRWGO staff: Visiting a fig nursery in Estahban in Fars province (October 2014, Estahban in Fars province)



Training for NRWGO staff: Land assessment training given by FRWO expert (October 2016, Shahrekord)



Training for NRWGO staff: Visiting school on forest and a capacity development project for women in a rural area (May 2016, Mashhad, Razavi Khorasan province)



Training for NRWGO staff: Field practice performed in training on forest and rangeland firefighting; a signboard to prevent fire damage was also made by a guard unit (June 2016, Lordegan district)



Project results dissemination seminar at the end of the extended phase: 200 participants at this open seminar; staff of the JICA head office participated as a panelist (November 2016, Shahrekord).

Activities of output 2: Selection of target villages, workshop in the villages, CF training, etc.



PRA Workshop: Work to make a resources map of the village (November 2010, Gazestan village in Bazoft area)



PRA Workshop: A transect walk (village reconnaissance) (July 2011, Robotkoh village in Bazoft area)



CF Training: Development and behavior of fire was lectured by forest police at training for forest guards; fire fighting practice was also performed (July 2012, Tabarak Sofla village in Bazoft area).



Cross sectoral joint seminar: CFs of five target villages joined at the start of the year to review the activities of the past year and consult on planning for the present year; the Chief Representative of JICA office also attended the seminar (May 2012, ChamGhale town in Bazoft area).



CF training: Visiting an advanced and well practiced fruit cultivation site; ideas actively exchanged between the lecturer and villagers (September 2012, Saman city and around).



CF training: Visiting the World Bank project site in Mazandaran province; a JAO extension officer is lecturing on a site-suitability test for medicinal plants to improve livelihood (May 2013, Mazandaran province).



CF training: Visiting a fig cultivation site in Fars province (November 2013, Fars province)



CF training: Training is given on a fig cultivation method in Bazoft area (September 2014, Tabarak village in Bazoft area)



CF training: Forest guards training in the Bazoft NRWO office (September 2014, Telurd town in Bazoft area)



CF training: Training on culture, tourism and handicraft manufacturing (June 2016, Dehnash village in Bazoft area)



CF training: Visiting a factory processing medicinal plants in Yasuj city (September 2014, Kohgiluyr-va-Boyer Ahmad province)



Funding source of villagers' activities: Microcredit activities grown as a source of funding the village (November 2016, Gazestan village in Bazoft area)

Activities of output 3: VAP contract agreement, Forest and Rangeland activities, Highland rangeland activities , Community Development activities



Forest and Rangeland sector: Confirming the boundary of the protected area with a villager (July 2011, Tarom village in Bazoft area)



A meeting to explain the project activities: Explaining the activities to be carried out (July 2011, Durak Sofla village in Bazoft area)



Forest and Rangeland sector: Digging the holes to construct the fence of the protected area (October 2011, Tarom village in Bazoft area)



Forest and Rangeland sector: Transporting stones to construct a check dam (October 2011, Gazestan village in Bazoft area)



Community Development sector: Sewing was most requested as a training subject by the women in all villages (October 2011, Mazerashte village in Bazoft area).



VAP evaluation: Reviewing the activities carried out in the 2nd year at the workshop; each CF presented the material they had prepared (April 2013, Durak Sofla village in Bazoft area).



Forest and Rangeland sector: Repairing the washed and dug out down side for maintaining a check dam (October 2012, Mazerashte village in Bazoft area)



Forest and Rangeland sector: Monitoring the growth of oak seedlings grown from the seeds sown (October 2012, Tarom village in Bazoft area)



Forest and Rangeland sector: Sowing wild celery seeds in the protected area; villagers sowed the seeds supplied by the project (November 2012, Mazerashte village).



Community Development sector: Fixing a fruit garden for experimentation and demonstration; many varieties of peach, pomegranates and pear, etc., were planted and the fence and signboards were also fixed (March 2012, Mazerashte village in Bazoft area)



Community Development sector: 460 hour of training was finished and the trainees obtained a license for sewing work (October 2012, Durak Sofla village in Bazoft area).



Community Development sector: A fruit tree expert recommended by JAO provided technical guidance on small-scale seedling production, nursery establishment, grafting, etc. (November 2012, Durak Sofla village in Bazoft area)



VAP evaluation: Workshop: a survey on how the villagers were satisfied with the project activities; the level of satisfaction was graded by the participants (November 2012, Durak Sofla village in Bazoft area)



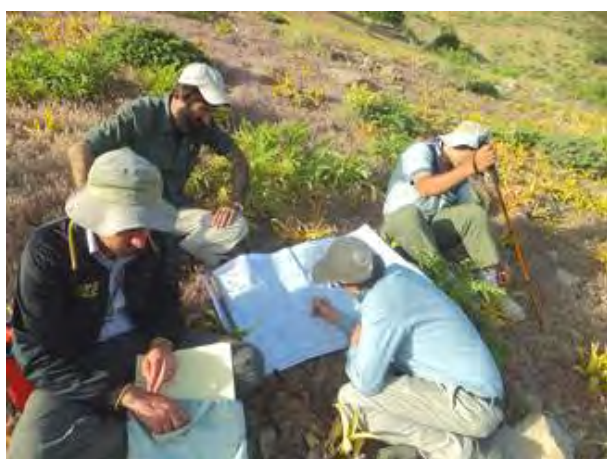
Forest and Rangeland sector: Planting in public land; planting the greening trees such as *Platycladus orientalis*, etc. in the garden of the local elementary school (March 2013, Tabarak sofla village in bazoft area)



Forest and Rangeland sector: Meeting for selecting the CFs; land rights holders of Khuzestan and Esfahan provinces also participated (April 2013, Durak Sofla village in Bazoft area).



Forest and Rangeland sector: An experiment to promote natural regeneration of oaks by land surface treatment (November 2013, Tabarak Sofla in Bazoft area)



Highland rangeland sector: confirming the location with the land rights holders in Robatkoh highland (May 2013, Robatkoh village in Bazoft area)



Highland rangeland sector: Explaining a draft VAP to stakeholders of the highland, in which land rights holders of Taron, Robatkoh, Durak Sofla village and Khuzestan province participated (September 2013, Taron village in Bazoft area).



Community Development sector: Technical guidance for seedling production activities; providing the OJT on pests and disease control, grafting, irrigation, etc. (May 2013, Durak Sofla village in Bazoft area)



Community Development sector: Site preparation for inter-cropping; the inter-cropping species were narrowed down to beans and tomatoes and beans could be sold (May 2013, Mazerashte village in Bazoft area).



Community Development sector: Training on beekeeping was given in cooperation with the Agriculture Training Center (November 2013, Gazestan village in Bazoft area)



Joint work by three sectors (Forest and Rangeland, Community Development, Staff Training): Training on constructing terraces for Agroforestry and a check dam (December 2013, Gazestan village in Bazoft area)



Forest and Rangeland sector: A survey for monitoring oak regeneration (August 2014, Durak Sofla village in Bazoft area)



Forest and Rangeland sector: Check dam maintenance; after heavy rain, a gully newly formed from the upper side of the dam body (April 2015, Durak Sofla village in Bazoft village)



Highland Rangeland sector: Germination of wild celery was confirmed in Robotkoh highland (May 2014, Robotkoh village in Bazoft area)



Highland Rangeland sector: Nomad meeting to form a consensus on VAP activities (May 2014, Robotkoh village in Bazoft area)



Community Development sector: Peaches were at the harvest stage and could be sold in Tabarak Sofla village (July 2014, Mazerashte village in Bazoft area).



Community Development sector: A survey for trial of growing saffron that can be sold (September 2014, Farsan district)



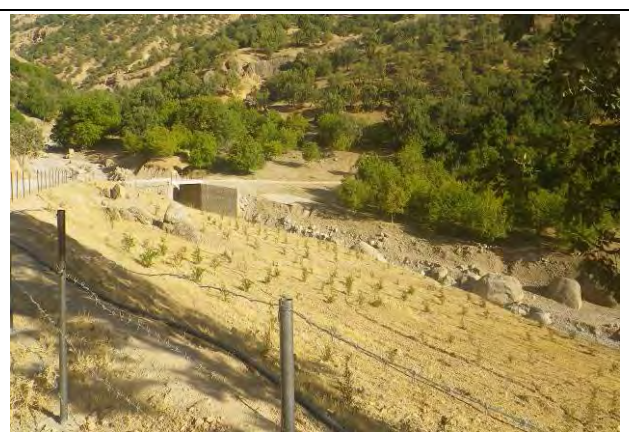
Forest and Rangeland sector: A forest enrichment project of the forest office of NRWGO held a meeting for fig cultivation (November 2015, Mazerashte village in Bazoft area).



Forest and Rangeland sector: Vegetation in the protection area at seven years after being established; wild garlic regeneration (May 2016, Mazerashte village in Bazoft area)



Forest and Rangeland sector: Dialog between forest guards and villagers/security guards (August 2016, Durak Sofla village in Bazoft area)



Forest and Rangeland sector: Pomegranate (commercial tree species) is growing well (September 2016, Mazerashte village in Bazoft area)



Community Development sector: Training on marketing; packing and labeling of the products, etc. (October 2016, Durak Sofla village in Bazoft area)



Highland Rangeland sector: Establishment of a survey plot for rangeland regeneration in a permanent plot (November 2016, Mazerashte village in Bazoft area)



Guideline: Carrying out a survey to gather opinions of NRWGO of other provinces to revise the guidelines of participatory forest and rangeland management (May 2016, West Azerbaijan province)



Guideline: Holding a workshop on the guidelines of participatory forest and rangeland management (November 2016, Shahrekord)

Activities of output 4: Cooperation with other organizations, Internal coordination of NRWGO



Cooperation with other organizations: Consulting with Horticulture Division of JAO to enhance the cooperation made it possible for technical support to be provided (March 2013, Shahrekord)



Cooperation with other organizations: Consulting with the Director General of NRWGO, the budget personnel of NRWGO and the Provincial Government; explaining a method of regenerating oak by sowing (May 2014, Tarom village in Bazoft area)



Cooperation with other organizations: Interview with the head of women section of the Provincial Government (May 2014, Shahrekord)



Cooperation with other organizations: A survey on how other organizations (MENARID is a leading organization) are coordinating with each other (January 2016, Kermanshah city, Kermanshah province)



Internal coordination: Discussion in a meeting of Participatory Projects Coordination Committee (PCC) (May 2016, Shahrekord)



Coordination between organizations: Participating in a meeting with the provincial PBO after visiting the national PBO (May 2016, Shahrekord)

ABBREVIATION

No.	Abbreviations	Name (English)
1	APO	Annual Plan of monthly Operation
2	C/P	Counterpart
3	CD	Capacity Development
4	CF	Community Facilitator
5	FRWO	Forest, Rangeland and Watershed Management Organization
6	DOE	Department of Environment
7	ICHHTO	Iran Cultural Heritage, Handy Craft and Tourism Organization
7	ICR (DF)	Inception Report (Draft)
8	IrJ-PFRMP	The Participatory Forest and Rangeland Management Project in Chaharmahal -va- Bakhtiari Province “in the Islamic Republic of Iran
9	IRR	Iranian Rial
10	IWM	Integrated Watershed Management
11	JAFTA	Japan Forest Technology Association
12	JAO	Jihad-e-Agriculture Organization
13	JCC	Joint Coordinating Committee
14	JICA	Japan International Cooperation Agency
15	JOFCA	Japan Overseas Forestry Consultants Association
16	JOT	Joint Operation Team
17	MENARID	Integrated Natural Resources Management in the Middle East and North Africa
18	M/M	Minutes of Meeting
19	MOJA	Ministry of Jihad-e Agriculture
20	MPO	Management and Planning Organization
21	NRWO	Natural Resources and Watershed Office

21	NRWGO	Natural Resources and Watershed Management General Office of Chaharmahal-va-Bakhtiari Province
22	OECD-DAC	Organization for Economic Cooperation and Development - Development Assistance Committee
23	PBO	Planning and Budget Organization
24	PCC	Participatory Project Coordination Committee
25	PDM	Project Design Matrix
26	PO	Plan of Operation
27	PRA	Participatory Rural Appraisal
28	PPP	Participatory Protection Project
29	R/D	Record of Discussions
30	SCI	Sanyu Consultants Inc.
31	TVTO	Iran Technical & Vocational Training Organization
32	UNDP	United Nations Development Programme
33	VAP	Village Action Plan
34	WS	Workshop

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ANNEX

CHAPTER 1 FRAMEWORK OF THE PROJECT

1.1 Background of the Project

The River Karoon, flowing across five south-western provinces of the Islamic Republic of Iran, has the largest watershed area in the country, 50% of which is in Chaharmahal-va-Bakhtiari Province. In recent years, natural disasters, such as soil erosion, debris-avalanches, landslides, etc., have occurred there, following a decline in ground cover due to illegal logging and overgrazing in the upstream area, which has reduced the capacity of the land to conserve water.

The Japan International Cooperation Agency (JICA) conducted a development study entitled “The Karoon River Watershed Management Plan” from 2000 to 2003, whereupon a watershed management Master Plan was formulated. The study pointed out the need of operations to: i) mitigate the damage caused by flooding, debris-avalanches and landslides, ii) decrease soil erosion and improve the capacity of the land to conserve water, iii) restore and improve vegetation, iv) boost the living standard of local people, v) improve distribution channels for agricultural products and disseminate agricultural techniques.

After formulating the Master Plan, the Iranian government took the initiative to conduct disaster prevention works. However, activities to “improve the living standards of local people” and “natural resource management” have not been implemented with sufficient understanding by the local people involved; hence no satisfactory outcome has been reached.

Under these circumstances, the government of the Islamic Republic of Iran requested that the Japanese government conduct a technical cooperation project on the appropriate use of natural resources by conducting forest and rangeland management; involving the participation of local people and introducing alternative income generation sources in an effort to end a vicious cycle of land degradation caused by overuse of forest resources and overgrazing.

In response, JICA dispatched a study team to formulate a detailed plan in October 2009. The mission confirmed the necessity and adequacy of the Project through consultation and field surveys with the government authorities concerned of the Islamic Republic of Iran. The study team also discussed the cooperation plan with the Iranian side, which included the activities and target areas to be covered and both parties signed and exchanged the Minutes of Meeting (M/M) of the Project.

The Project has been implemented in accordance with the Record of Discussions (R/D) agreed upon, signed and exchanged between JICA and Counterpart (C/P) organizations (FRWO and NRWGO) of the Islamic Republic of Iran in March 2010 and another R/D to extend the Project implementation period confirmed in March 2015.

1.2 The characteristics of the target area

Chaharmahal-va-Bakhtiari Province is located in the center of the Zagros mountain range in the western part of Iran. Its elevation ranges from 800 to 4,500m above sea level and it has a Mediterranean climate, i.e. humid and very cold in winter, while dry and very hot in summer. As for vegetation, grasses resistant to cold dominate at around 4,000 m above sea level and shrubs of *Juniperus* spp. proliferate at around 3,500m above sea level. Grasses of *Gramineae* and *Leguminosae* spp., important for fodder and 11 tree species such as *Quercus* spp. dominate below 2,500 m above sea level. The forest area covers approximately 18.6% and the rangeland 66.7% of the total province.

Natural forests are distributed over Bazoft to the Ferald plateau and constitute the main forested areas in Chaharmahal-va-Bakhtiari province. In these forests, *Quercus* spp. comprises 98% of the species, while wild pistachios, hawthorns, figs and sumacs, etc. also grow.

The Zayande River and a tributary of Karoon River in the province flow down to Khuzestan and Esfahan provinces and supply more than 10% of the water of Iran.

1.3 Conditions of the Project implementation

1.3.1 Socio-economic conditions

Due to opaque nuclear development activities of Iran, since 2006, the UN Security Council has adopted a resolution to strengthen phased sanctions. Despite the hindrance to national economic management of Iran posed by the economic sanctions of Western countries and Japan, project activities were implemented.

In particular, following the Iranian Islamic revolution of 1979, diplomatic relations with the United States were closed off. Despite this, diplomatic negotiations aiming to resolve nuclear suspicion and lift the sanctions continued, agreement was reached on nuclear development in July 2015 and economic sanctions were considered canceled as of January 2016.

Economic sanctions by foreign countries have hit the Iranian domestic economy hard. In particular, the additional economic sanctions enforced in 2010 made it impossible to transfer money to Iranian banks. Moreover, the exchange rate value of the Iranian Rial declined significantly, which hit the Iranian economy hard and sparked further national inflation.

At the start of the Project implementation in 2010, economic conditions in the country were unstable due to significant inflation and the Iranian government had to continue negotiating with EU countries on nuclear issues. In 2012, the Iranian government official exchange rate of the Iranian Rial against the US dollar declined to about half (1US \$ = 30,000IRR). In 2013 meanwhile, the fourth year of Project implementation, a presidential election was held and Mr. Rouhani, considered a moderate, was elected as president. He has promoted dialog with the United States and European countries and diplomatic negotiations are expected to help remove economic sanctions. In 2014, the final year of Project implementation, negotiations with the United States ensued and the sanctions were partially lifted. Although not all issues could be resolved, the exchange rate of the Iranian Rial against the US dollar, which had halved, stabilized again at around 1US \$ = 30,000IRR. During the Project extension phase, Mr. Trump was elected as US president in November 2016 and he indicated a wish to break off the agreement on the nuclear issue, whereupon the exchange rate of the Iranian Rial against the US dollar dropped to the range 1US\$ = 38,000 ~40,000IRR.

Among the particular impacts on the Project in 2012 (the third year), despite remitting the minimum required expenses, such as the salary of the NRWGO staff, it was said that part of the FRWO budget had been transferred to the province and the ordinary project budget had been significantly reduced, restricting the activities of counterparts (C/P). After the new administration got underway in 2013 (fourth year), there was no major change in the austerity budget circumstances, but in the fifth year, allocation of a business budget by the new administration is said to have regularly taken place. The decline in crude oil prices since 2014, conversely, is believed to affect future economic situations. The budget allocation was dull in 2015, reviewing the enforcement policy of the ex-government. In 2016, cutting the approved budget and delaying the budget disbursement became prominent.

1.3.2 Natural resource management related policy

FRWO operations were approved in 1958 and have since been executed on the basis of the natural resources law, to which the necessary additions and amendments are being made. Conversely, following the Islamic Revolution in 1979, a national development plan has been formulated every five years. At the start of the project implementation, the fourth Five-Year Plan was implemented and during the project implementation period, the Fifth Five-Year Plan was prepared and then implemented. The Sixth Five-Year Plan is being formulated in the final (fifth) year of project implementation. A five-year national development plan is prepared and implemented by FRWO and a provincial level Five-Year Plan is prepared and implemented by NRWGO respectively.

In the beginning of the Project implementation, the national forest and rangeland management policy of NRWGO focused on forest protection. Since the promulgation of the agricultural and natural resources productivity promotion Act of 2011, however, government policy has been shifting toward deregulation of land use and the concept that areas available for production should be used productively, even if in forests and/or rangeland managed by NRWGO. Although the idea appears to have been disseminated among NRWGO officers, the implementation system has yet to be developed.

In the extension phase that started in September 2015, it was clearly indicated that the government would utilize national forest and rangeland and the implementation of a participatory conservation project or medicinal plant project and plantation of economic tree species in other projects were promoted.

1.4 Objective and framework of the Project (PDM and its revision process)

1.4.1 Objective of the Project

The purpose of implementing the Project is to improve the capacity of NRWGO to cope with issues involved in “rehabilitating natural vegetation to be carried out amid mutual understanding among people” so that NRWGO can use natural resources by itself appropriately, mitigate the land degradation caused by excessive forest use and overgrazing, manage forests and rangeland management with people’s participation and introduce alternative livelihood measures in Chaharmahal-va-Bakhtiari Province; located upstream of the Karoon River, which has the country’s largest watershed area.

Therefore, based on the R/D of March 2010, “The capacity of NRWGO for participatory forest and rangeland management is enhanced.” was set as a project goal and the Project has been implemented for five years from July 2010 to achieve the following four outcomes:

- ① The Capacity Development (CD) Strategy for NRWGO is indicated.
- ② Regeneration of the forest and rangeland is promoted in the target villages.
- ③ Alternative income sources for forest and rangeland conservation are introduced in the target villages.
- ④ A Capacity Development Plan for NRWGO with regard to participatory forest and rangeland management is formulated/ implemented.

In addition, the overall goal of the PDM project is to introduce “Participatory forest and rangeland management in Chaharmahal-va-Bakhtiari Province”.

Since September 2016, related institutional coherence activities were added in accordance with the recommendation that emerged from the final evaluation survey and an extension phase was implemented from 2015 to 2016 by rearranging and amending under the PDM output level. There was no change in the overall goal and project purpose.

- ① Based on the Capacity Development (CD) Strategy for NRWGO, a participatory forest and rangeland management system of NRWGO is prepared.

- ② An implementation system for sustainable participatory forest and rangeland management in the target villages is prepared and strengthened.
- ③ Participatory forest and rangeland management activities in the target villages are promoted.
- ④ Toward sustainable participatory forest and rangeland management activities, collaborative relations are structured among the organizations concerned.

1.4.2 Implementation policy of the Project

(1) Basic strategy of Capacity Development (CD) of the Project.

According to the Capacity Development (CD) report compiled by JICA in 2006, the definition of CD by the main aid institutes is generalized as follows:

“Capacity for comprehensive coping in developing countries (Capacity Development) is ‘the process of progressing process to deal with problems in developing countries by an entirety on plural levels, such as individuals, organizations, society’ and the capacity is ‘the capacity of developing countries to deal with development issues themselves’ and comprehensively concern it as ‘a system comprising various elements, including policy, society and system’ and seriously consider their own initiative efforts of developing countries (spontaneously).”

Taking into account the above mentioned JICA perspective, the term of CD is understood as follows: “Improving the capacity to manage issues on their own initiative for the target people and organizations of the Project”. The concerned parties of CD of the Project are:

- Administrative organizations (NRWGO staff, organization)
- Villages (individuals, village organizations, including both sides of village society and livestock societies of the area)
- Community Facilitators (CFs) who support the participatory activities of the implementation target village.

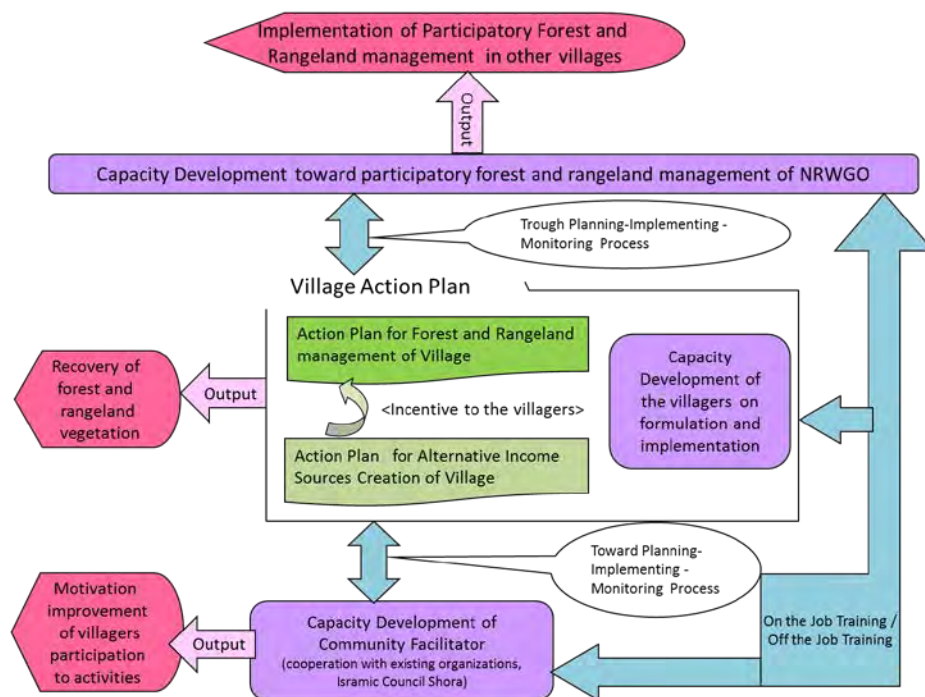


Figure 1-1 Overall image of the Capacity Development (CD) strategy

During the Project, the target improvement of CD (ability to cope with the issues to be solved) of NRWGOs and CFs working in the target villages was defined in the following context and project activities were carried out.

Target improvement capacity to cope with the issues to be solved for NRWGO:

NRWGO staff members can prepare the Village Action Plan (VAP) and support its implementation in the Project target area. In addition, based on experience, these members can also prepare and execute the VAP to solve problems in villages outside the target area.

Target improvement capacity to cope with issues to be solved for target villages under implementation:

During the Project implementation (experts, NRWGO staff members) and the village (villagers and village organizations) cooperate in the village and can prepare and execute a VAP, including alternative income sources activities for villagers and a forest and rangeland regeneration plan. Moreover, based on the experience of the Project, the villages can revise and execute the VAP spontaneously; working with NRWGO or other administrative organizations.

Target improvement capacity to cope with the issues to be solved for the CF of the target villages:

CF is selected among influential persons or young persons in villages such as progressive farmers or Shora (Islamic Council) depending on the situation in the village. The CF develops expertise in liaison and coordination work and in implementing activities that help assist in preparing and executing VAP in the target village during the Project implementation period; working with the Project side (experts, NRWGO staff members) and village side (villagers and village organizations).

On completion of the Project, it is expected that among the VAP, vegetation will have recovered slightly in the protected area, after rolling out the forest and grassland regeneration plan and boosting people's income by an alternative income source activities plan. Moreover, if possible, the groups aim to be industrial and independently managed organizations and CFs also play a key role in managing the organization and the activities maintained and extended.

(2) Technical Policy: Participatory development toward trust-building among government and villagers

The participatory development in this Project, is a tool for sustainable development and management of natural resources through governmental promotion of forestry and rangeland regeneration activity, with the participation of villagers (rural communities).

In the target area, forest and rangeland are affected by grazing of villagers' livestock, which constitutes their main livelihood, for which the government needs to make conservation and ensure the sustainable utilization of a forest and rangeland management plan for secure pastures. When formulating such plans, the government must consider opinions and feedback of rural communities to gain their support for their implementation, based on accumulated experience rather than proceeding unilaterally.

In this context, the process of plan formulation must be examined. During the formulation stage in particular, there is a need to consider the situation and requirements of villagers and ensure transparency in the process- introducing Public Involvement¹ in other words - whereupon the smooth implementation of the plan and full cooperation of rural communities will be achieved.

¹ In the process of policy-making, planning and operation, as well as giving information to related residents, stakeholders and general peoples, hearing their opinions and reflecting them in the policy and plan.

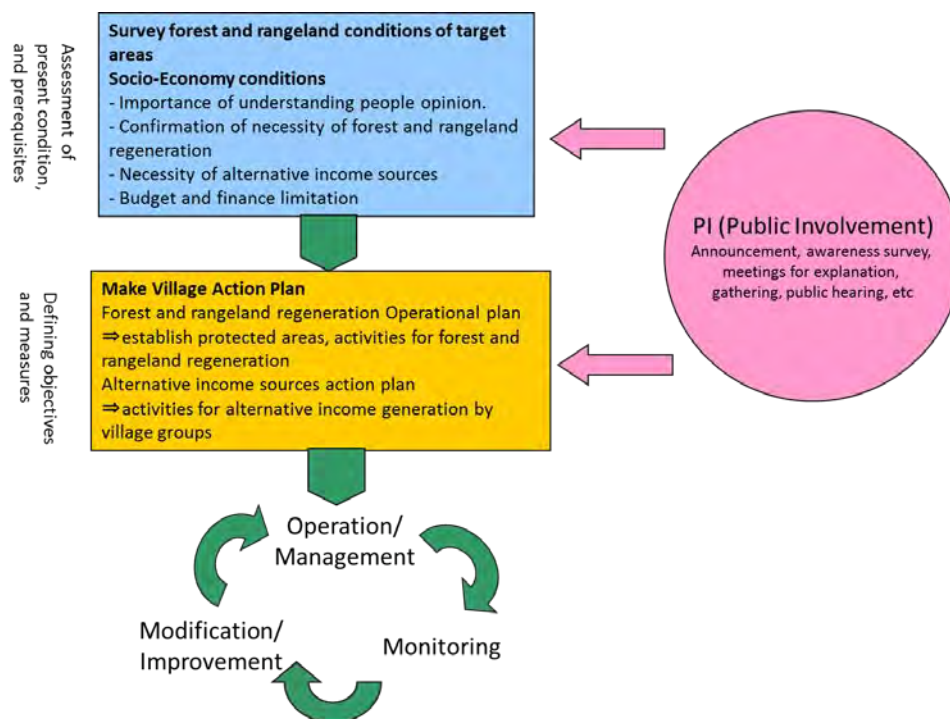


Figure 1-2 How to introduce Public Involvement

Some misunderstandings exist among the government and people in terms of the one-way operation of government initiatives. This approach runs contrary to the participatory approach and should be corrected to regain villagers' confidence in governmental plans.

Since the participatory approach treats participants equally, regardless of age, sex and social status, this Project will hold workshops in easily accessible venues, forming male and female sections to observe social norms and Islamic values. Community Facilitators (CF) engaged in project activities would be both male and female. The timing of workshop and other training activities would be configured such as to allow even busy women and the nomad population to participate.

1.4.3 Change of PDM contents from 2010 to 2016

(1) Discussion over the PDM and its approval in the JCC at the beginning of the Project (August 2010, first year)

During the first JCC held at the beginning of the Project implementation, the PDM based on the R/D, which was signed in March 2010, was accepted as confirmation of its conceptual alignment with the NRWGO policy and none of its contents had to be changed.

Table 1-1 PDM at the beginning of the Project (March 2010).

(2) Matters highlighted in the 2nd JCC (February 2011 1st year)

A study of PDM indicators and a detailed PO draft was proposed at JCC and JCC members instructed Project experts to consider objectively verifiable indicators further at JOT.

(3) Revision of the PDM in the 3rd JCC (November 2011, 2nd year)

Regarding PDM indicators, specific dates and figures for the portions described as xx%, etc. in the original PDM as well as clear meanings of the indicators concerned were proposed by JOT and then approved by JCC.

(4) Revision of the PDM in the 4th JCC (October 2012, 3rd year)

Based on the recommendations by the mid-term review, the preparation of participatory forest and rangeland management guidelines was added to outputs 2 and 3. Although the C/P objected to the term “attitude” used in indicating the Project objectives, no decision on changing this term had yet been made.

(5) Revision of the PDM in the 5th JCC (November 2013, 4th year)

The undecided portion in the PDM indicators, which had been revised in the last JCC, was discussed during the implementation period in the fourth year and a revised PDM was approved in the JCC. Table 1 1-2 PDM after the mid-term review (March 2013).

(6) Revision of the PDM in the 8th JCC (April 2015, 5th year)

Based on recommendations made by the final evaluation study conducted in January and February 2015, the Project outputs and activities were rearranged and amended. In particular, aspects on collaboration and dissemination of activities were added to enhance the Project sustainability, because it was pointed out that sustainability had not been ensured. This was discussed repeatedly at the expert meeting and then approved by the JCC. Table 1-3 PDM after the final evaluation (April 2015)

(7) Revision of the PDM in the 2nd JCC of the extended phase (February 2016)

As for setting an indicator of the previous PDM, this was discussed in JOT and approved in JCC. For example, the number of activity areas set was five as an overall goal and it was agreed that NRWGO would approve the agency proposal to strengthen collaboration. Table 1-4 PDM at the 2nd JCC in the extended phase

Table1-1 PDM at the beginning of the Project (March 2010).

10

Project Design Matrix (PDM)

Version 1

Project Title: The Participatory Forest and Rangeland Management Project in Chaharmahal-va-Bakhtiari Province

Supervising Agency: Forest, Rangeland and Watershed Management Organization (FRWO), Implementing Agency: Natural Resources and Watershed Management General Office (NRWGO) Chaharmahal-va-Bakhtiari

Direct Beneficiaries: Staff of NRWGO Chaharmahal-va-Bakhtiari Province, Indirect Beneficiaries: Residents of Target Villages

Target Areas: 1) Chaharmahal-va-Bakhtiari Province, 2) Target Villages in Bazoft Area

Project Period: Five (5) years from 2010

Narrative Summary	Objectively Verifiable Indicators ^{*4}	Means of Verification	Important Assumptions
Overall Goal			
Participatory forest and rangeland management ^{*1} is introduced in Chaharmahal-va-Bakhtiari Province	1 By using the knowledge and experience gained from the Project, NRWGO will newly introduce participatory forest and rangeland management at least 1(one) village in Chaharmahal-va-Bakhtiari Province	1 NRWGO Monitoring Report	There is no role change of NRWGO.
Project Purpose			
The capacity of NRWGO for participatory forest and rangeland management is enhanced.	1 More than X% of project participants in NRWGO will utilize knowledge / experience gained from the Project. 2 More than X% of project participants in target villages will value that NRWGO's capacity of forest & rangeland management was enhanced. 3 X % of project participants in target villages will be benefited by the Project by X, 2014.	1 Result of the interview to the project participants(NRWGO) 2 Result of the interview to the project participants(NRWGO) 3 Result of the interview to the project participants in the target villages	Substantial number of trained NRWGO staff will not leave the project.
Outputs			
1. The Capacity Development(CD) ^{*2} Strategy for NRWGO is indicated.	1 Capacity Development Strategy Report will be prepared by X, 2010.	1 Capacity Development Strategy Report	① There is no major policy change in forestry management, community development and capacity development of FRWO / NRWGO.
2. Regeneration of forest and rangeland is promoted in the target villages.	1 X% of forest & rangeland of Model Plots will increase in each target village by X, 2014.	1 Forest & Rangeland Regeneration Plan of each target village 2 Project Progress Report	② There is no serious natural disaster which prevents regeneration of forest & rangeland, and introduction of alternative income source.
3. Alternative income source for forest and rangeland conservation are introduced in the target villages .	1 X Community Facilitators will be trained in each target village by X, 2011. 2 At least one(1) Village Action Plan will be conducted in each target village by X, 2014.	1 Training Program for Community Facilitators Village Action Plan Project Progress Report	③ There is no serious economic recession in Iran.(Output 3)
4. The Capacity Development Plan for NRWGO with regard to participatory forest and rangeland management is formulated / implemented.	1 At least five(5) CD modules will be conducted every year. 2. At least X% of NRWGO technical staff will participate in CD program.	1 The Capacity Development Plan for NRWGO Project Progress Report	
Activities	Inputs		
1.1 Understand natural conditions and socio-economic situations of target areas.	Japan Side	Iran Side	
1.2 Understand problem and initiative for participatory forest & rangeland management.	(1) Japanese Experts 1) Chief Adviser 2) Participatory Community Development 3) Capacity Development/ Training 4) Participatory Forest & Rangeland Management 5) Project Coordinator	(1) Counterpart Staff 1) Project Director 2) Project Manager 3) Deputy Project Manager (full time position) 4) Project Coordinator 5) Counterpart staff in; ①FRWO (Teheran) ②NRWGO (Shahre-Kord) ③NRO (Koohrang) ④NRWGO Field Office (Bazoft) 6) Administrative staff for project implementation	
1.3 Understand ongoing activities of similar projects in and out of the target area.	(2) International Training 1) Based on necessity for project implementation, Counterpart Training will be conducted in Japan or in the third country (one or two persons per year from counterpart personnel).	(2) Project Office, Equipment and Materials 1) Office Space for Japanese experts ①NRWGO (Shahre-Kord) ②NRWGO Field Office (Bazoft) 2) Equipment and materials which are required for following activities; ①Village Action Plan ②Training Program for Community Facilitators ③Forest & Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO	
1.4 Understand knowledge, capacity and willingness for participatory forest & rangeland management among the staff of NRWGO.	(3) Equipment and Materials 1) Based on necessity, equipment and materials which are required for implementation of followings; ①Village Action Plan ②Training Program for Community Facilitators ③Forest & Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO	(3) Project Cost 1) Project cost which is required for following activities; ①Village Action Plan ②Training Program for Community Facilitators ③Forest & Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO	
1.5 Identify local resources and/or service providers for CD.	(4) Project Cost 1) General expenditure for the activities of Japanese experts 2) Partial costs which are required for implementation of followings; ①Village Action Plan ②Training Program for Community Facilitators ③Forest & Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO		
1.6 Based on the information and data obtained, prepare Project Baseline Survey Report.			
1.7 Elaborate the CD Strategy for NRWGO.			
1.8 Identify target villages for participatory forest & rangeland management, and introduction of alternative income source.			
2.1 Prepare operational Plan for Forest & Rangeland Regeneration in the target villages.			
2.2 Establish Model Plots in the target villages.			
2.3 Extract lessons & learns by analyzing previous similar projects.			
2.4 Discuss and agree common target/goal for protecting Model Plots with local residents of target villages.			
2.5 Based on the actual condition of Model Plots, implement regeneration operations.			
2.6 Based on the actual condition of the area, implement tree planting, agro-forestry and erosion control activities in the target villages.			
3.1 Prepare Village Action Plans for participatory forest & rangeland management of each target group in all target villages.			
3.2 Prepare plans for training programs for Community Facilitators who will assist CD.			
3.3 Identify/formulate people's organization in respective target village.			
3.4 Select participants for the training programs for Community Facilitators.			
3.5 Implement training programs for Community Facilitators.			
3.6 Implement CD programs for participatory forest & rangeland management to local residents of target villages.			
3.7 Monitor on the impact of the CD programs among program participants.			
3.8 Monitor and evaluate CD programs and obtain feedbacks.			
4.1 Identify themes for CD program of NRWGO staff for each target group.			
4.2 Identify resource and service provider for CD program for NRWGO staff.			
4.3 Elaborate CD programs for participatory forest & rangeland management for NRWGO staff.			
4.4 Implement CD programs for participatory forest & rangeland management for NRWGO staff.			
4.5 Monitor on the impact of the CD programs among NRWGO staff.			
4.6 Monitor and evaluate CD programs and obtain feedbacks.			

*1 "Participatory Forest and Rangeland Management" is protection, utilization and regeneration of forest and rangeland management through participation and support of the people living nearby forest & rangeland.

*2 "Capacity Development(CD)" is the process in which problem-managing skills are enhanced collectively at individual, organizational, and societal levels.

*3 "Village Action Plan" contains the detailed design of activities for alternative income source that each target village will implement by applying the participatory methodology.

*4 "X" will be determined and mutually agreed between Iran side and Japan side upon the commencement of the Project.

Table1 1-2 PDM after the mid-term review (March 2013)

3 December, 2013

Revised Project Design Matrix (PDM)

Version 4

Project Title: The Participatory Forest and Rangeland Management Project in Chaharmahal-va-Bakhtiari Province
 Supervising Agency: Forest, Rangeland and Watershed Management Organization(FRWO), Implementing Agency: Natural Resources and Watershed Management General Office (NRWGO) Chaharmahal-va-Bakhtiari
 Direct Beneficiaries: Staff of NRWGO Chaharmahal-va-Bakhtiari Province, Indirect Beneficiaries: Residents of Target Villages
 Target Areas: 1) Chaharmahal-va-Bakhtiari Province, 2) Target Villages in Bazoft Area
 Project Period: Five (5) years from 2010

Narrative Summary	Objectively Verifiable Indicators ^{*4}	Means of Verification	Important Assumptions
Overall Goal			
Participatory forest and rangeland management ^{*1} is introduced in Chaharmahal-va-Bakhtiari Province	1. By using the knowledge and experience gained from the Project, NRWGO will newly introduce participatory forest and rangeland management at least 1(one) village in Chaharmahal-va-Bakhtiari Province	1 NRWGO Monitoring Report	There is no role change of NRWGO.
Project Purpose			
The capacity of NRWGO for participatory forest and rangeland management is enhanced.	1. More than 70 % of project participants in NRWGO will utilize knowledge / experience gained from the Project. 2. More than 70 % of project participants in target villages will value that NRWGO's capacity of forest & rangeland management was enhanced and NRWGO attitudes was improved. 3. 70 % of project participants in target villages will be benefited by the Project by December, 2014.	1. Result of the interview to the project participants(NRWGO) 2. Result of the Test of CD program 3. Result of the interview to the project participants(NRWGO) Result of the interview to the project participants in the target villages	Substantial number of trained NRWGO staff will not leave the project.
Outputs			
1 The Capacity Development(CD) ^{*2} Strategy for NRWGO is indicated.	1. Capacity Development Strategy Report will be prepared by December, 2012.	1 Capacity Development Strategy Report	
2 Regeneration of forest and rangeland is promoted in the target villages.	1. 75% of newly created Model Plots will achieve the purpose of establishment and maintained by December, 2014. 2. 75% of newly created Model Plots are evaluated that vegetation are recovered by December, 2014.	1. Forest & Rangeland Regeneration Plan of each target village 2. Project Progress Report	① There is no major policy change in forestry management, community development and capacity development of FRWO / NRWGO.
3 Alternative income source for forest and rangeland conservation are introduced in the target villages .	1 Training program for CF candidate at least 5 persons in each village are initiated by December, 2012. 2 70% of necessary number of CFs for VAP sub-project activities will be maintained by December, 2014. 3 At least one (1) Village Action Plan will be conducted in each target village by December, 2014. 4 50% of participants of sub-projects will be wanted to continue their activities after this project	1. Training Program for Community Facilitators 2. Village Action Plan Project Progress Report	② These is no serious natural disaster which prevents regeneration of forest & rangeland, and introduction of alternative income source.
4 The Capacity Development Plan for NRWGO with regard to participatory forest and rangeland management is formulated / implemented.	1. At least 5 CD modules will be conducted every year. 2. At least 60% of NRWGO technical staff will participate in CD program. 3. 50% of participants [who have attended "PCM, PRA, Participatory method "module,] in CD program have drafted/drafting at least a project design and/or a proposal.	1. The Capacity Development Plan for NRWGO 2. Project Progress Report	③ There is no serious economic recession in Iran.(Output 3)
Activities	Inputs		
1.1 Understand natural conditions and socio-economic situations of target areas.	Japan Side	Iran Side	
1.2 Understand problem and initiative for participatory forest & rangeland management.	(1) Japanese Experts 1) Chief Adviser 2) Participatory Community Development 3) Capacity Development/ Training 4) Participatory Forest & Rangeland Management 5) Project Coordinator	(1) Counterpart Staff 1) Project Director 2) Project Manager 3) Deputy Project Manager (full time position) 4) Project Coordinator 5) Counterpart staff in; ①FRWO (Teheran) ②NRWGO (Shahre-Kord) ③NRO (Koohrang) ④NRWGO Field Office (Bazoft) 6) Administrative staff for project implementation	
1.3 Understand ongoing activities of similar projects in and out of the target area.			
1.4 Understand knowledge, capacity and willingness for participatory forest & rangeland management among the staff of NRWGO.	(2) International Training 1) Based on necessity for project implementation, Counterpart Training will be conducted in Japan or in the third country (one or two persons per year from counterpart personnel).	(2) Project Office, Equipment and Materials 1) Office Space for Japanese experts ①NRWGO (Shahre-Kord) ②NRWGO Field Office (Bazoft) 2) Equipment and materials which are required for following activities; ①Village Action Plan ②Training Program for Community Facilitators ③Forest & Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO	
1.5 Identify local resources and/or service providers for CD.			
1.6 Based on the information and data obtained, prepare Project Baseline Survey Report.	(3) Equipment and Materials 1) Based on necessity, equipment and materials which are required for implementation of followings; ①Village Action Plan ②Training Program for Community Facilitators ③Forest & Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO	(2) Project Office, Equipment and Materials 1) Office Space for Japanese experts ①NRWGO (Shahre-Kord) ②NRWGO Field Office (Bazoft) 2) Equipment and materials which are required for following activities; ①Village Action Plan ②Training Program for Community Facilitators ③Forest & Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO	
1.7 Elaborate the CD Strategy for NRWGO.			
1.8 Identify target villages for participatory forest & rangeland management, and introduction of alternative income source.			
2.1 Prepare Village Action Plan for Forest & Rangeland Regeneration in the target villages.	(4) Project Cost 1) General expenditure for the activities of Japanese experts 2) Partial costs which are required for implementation of followings; ①Village Action Plan ②Training Program for Community Facilitators ③Forest & Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO	(3) Project Cost 1) Project cost which is required for following activities; ①Village Action Plan ②Training Program for Community Facilitators ③Forest & Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO	Pre-Conditions
2.2 Establish Model Plots in the target villages.			
2.3 Extract lessons & learns by analyzing previous similar projects.			
2.4 Discuss and agree common target/goal for protecting Model Plots with local residents of target villages.			
2.5 Based on the actual condition of Model Plots, implement regeneration operations.			
2.6 Based on the actual condition of the area, implement tree planting, agro-forestry and erosion control activities in the target villages.			
2.7 Based on the above activities, prepare a guideline for forest and rangeland regeneration			
3.1 Prepare Village Action Plans for participatory forest & rangeland management of each target group in all target villages.			
3.2 Prepare plans for training programs for Community Facilitators who will assist CD.			
3.3 Identify/formulate people's organization in respective target village.			
3.4 Select participants for the training programs for Community Facilitators.			
3.5 Implement training programs for Community Facilitators.			
3.6 Implement CD programs for participatory forest & rangeland management to local residents of target villages.			
3.7 Monitor on the impact of the CD programs among program participants.			
3.8 Monitor and evaluate CD programs and obtain feedbacks.			
3.9 Based on the above activities, prepare a guideline for participatory forest & rangeland management			
4.1 Identify themes for CD program of NRWGO staff for each target group.			
4.2 Identify resource and service provider for CD program for NRWGO staff.			
4.3 Elaborate CD programs for participatory forest & rangeland management for NRWGO staff.			
4.4 Implement CD programs for participatory forest & rangeland management for NRWGO staff.			
4.5 Monitor on the impact of the CD programs among NRWGO staff.			
4.6 Monitor and evaluate CD programs and obtain feedbacks.			

*1 "Participatory Forest and Rangeland Management" is protection, utilization and regeneration of forest and rangeland management through participation and support of the people living nearby forest & rangeland.

*2 "Capacity Development(CD)" is the process in which problem-managing skills are enhanced collectively at individual, organizational, and societal levels.

*3 "Village Action Plan" contains the detailed design of activities for alternative income source that each target village will implement by applying the participatory methodology.

Table1-3 PDM after the final evaluation (April 2015)

30 April, 2015

Project Design Matrix (PDM)

Version 8

Project Title: The Participatory Forest and Rangeland Management Project in Charmahal- va- Bakhtiari Province
 Supervising Agency: Forest, Rangeland and Watershed Management Organization (FRWO),
 Implementing Agency: Natural Resources and Watershed Management General Office(NRWGO)

Target Areas: 1) Charmahal- va- Bakhtiari Province, 2) Target Villages in Bazoft Area
 Project Period: Six and half a year (6.5 Year) from June 2010 to December 2016 (Extension Period: from June 2015 to December 2016)

Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall Goal			
Participatory forest and rangeland management*1 is introduced in Chaharmahal-va-Bakhtiari Province	1 Participatory forest and rangeland management activities in the target area are maintained, by using knowledge and experience gained from the project. 2 Participatory forest and rangeland management activities are newly introduced at least in XX sites in district level.	1 Monitoring report of NRWGO	There is no role change of NRWGO
Project Purpose			
The capacity of NRWGO for participatory forest and rangeland management is enhanced.	1 More than 70% of project participants in NRWGO will utilize knowledge/experience gained from the Project. 2 More than 70% of project participants in target villages will value that NRWGO's capacity of forest & rangeland management was enhanced and NRWGO attitudes was improved. 3 70% of project participants in target villages will be benefited by the Project by December, 2014. 4 Implementation system for participatory forest and rangeland management collaborated with concerned organizations is formulated by NRWGO.		Substantial number of trained NRWGO staff will not leave the project.
Outputs			
1 Based on Capacity Development (CD)*2 Strategy for NRWGO, participatory forest and rangeland management system of NRWGO is prepared.	1 Capacity Development Strategy report will be prepared by December, 2012. 2 At least 5 CD modules will be conducted every year. 3 At least 60% of NRWGO technical staff will participate in CD program. 4 50% of participants, who have attended "PCM, PRA, Participatory method" module, in CD program have drafted/drafting at least a project design and/or a proposal. 5 Capacity Development strategy action plan is formulated under the initiative of Iranian side and is endorsed by NRWGO. 6 More than 2/3 of NRWGO staff who receive training course achieve more than 4 understanding level in 5 categorized understanding levels.	1 Revised Capacity Development Strategy 2 Capacity Development Strategy report 3 Project reports 4 CD Strategy action plan 5 Evaluation form in each training course	① There is no major policy change in forestry management, community development and capacity development of FRWO/ NRWGO. ② There is no serious natural disaster which prevents regeneration of forest & rangeland, and introduction of alternative income source. ③ There is no serious economic recession in Iran.
2 Implementation system for sustainable participatory forest and rangeland management in the target villages is prepared and strengthened.	1 Training program for CF candidate at least 5 persons in each village are initiated by December, 2012. 2 70% of necessary number of CFs for VAP sub-project activities will be maintained by December, 2014. 3 Each CF capacity is 1 rank upper than before in 5 categories defined by the project. 4 At least 1 activity funded by Iranian side is implemented	1 Training program for community facilitators 2 Results of questionnaire to CFs 3 Project reports	
3 Participatory forest and rangeland management activities in the target villages are promoted.	1 75% of newly created Model Plots will achieve the purpose of establishment and maintained by December, 2014. 2 75% of newly created Model Plots are evaluated that vegetation is recovered by December, 2014. 3 At least one (1) Village Action Plan will be conducted in each target village by December, 2014. 4 50% of participants of sub-projects will be wanted to continue their activities after this project. 5 Participatory forest and rangeland management models in national land are formulated. 6 Villagers evaluate that illegal invasions from outside are decreased.	1 Forest & Rangeland Regeneration Plan 2 Project reports 3 Village Action Plan (VAP)	
4 Toward the sustainable participatory forest and rangeland management activities, collaborative relation among concerned organizations is structured.	1 More than 3 times of collaboration strengthen meeting are held. 2 Proposal regarding collaboration strengthening is accepted by XXX.	1 Project reports	
Activities	Inputs		
1.1 Understand natural conditions and socio-economic situations of target areas.	Japan Side (1) Experts 1) Chief Advisor 2) Participatory Community Development 3) Capacity Development/ Training 4) Participatory Forest & Rangeland Management 5) Project Coordinator 6) Inter-Organizational Strengthening Advisor (2) Counterparts Training 1) Based on necessity for project implementation, Counterpart Training will be conducted in Japan or in the third country (Appropriate number per year is estimated). (3) Equipments and materials 1) Based on necessity, equipments and materials which are required for implementation of followings: ①Village Action Plans ②Training Program for Community Facilitators ③Forest and Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO (4) Project Cost 1) General expenditures for the activities of Japanese experts 2) Partial costs which are required for implementation of followings: ①Village Action Plans ②Training Program for Community Facilitators ③Forest and Rangeland Regeneration Plan ④TheCapacity Development Plan for NRWGO	Iran Side (1) Counterparts and other staffs 1) Project Director 2) Project Manager 3) Deputy Project Manager 4) Project Coordinator 5) Counterpart staffs in: ①FRWO(Tehran) ②NRWGO(Shahrekord) ③NRWO(Koohrang) ④NRWGO Field Office (Bazoft) 6) Administrative staff for project implementation (2) Project Office, Equipment and Materials 1) Meeting Room and Office for common use by experts 2) Office space for Japanese experts: ①NRWGO (Shahrekord) ②NRWGO Field Office (Bazoft) 3) Equipments and materials which are required for the following activities: ①Village Action Plan (VAP) ②Training Program for Community Facilitators ③Forest and Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO ⑤Transportation measure such as car (3) Project Cost 1) General expenditures for the activities of Iranian experts 2) Budget for implementing the following activities: ①Village Action Plan (VAP) ②Training Program for Community Facilitators ③Forest and Rangeland Regeneration Plan ④The Capacity Development Plan for NRWGO	① There is no increase in poverty rate in target areas. ② There is no big fluctuation in livestock price in target areas. ③ Policy makers and decision makers understand the importance of target areas.
1.2 Understand problem and initiative for participatory forest & rangeland management.			
1.3 Understand ongoing activities of similar projects in and out of the target area and extract lessons & learns by analyzing previous similar projects.			
1.4 Based on the information and data obtained, prepare Project Baseline Survey Report.			
1.5 Elaborate the CD Strategy for NRWGO.			
1.6 Revise the CD Strategy focused on extension of the participatory forest and rangeland management.			
1.7 Discuss about the action plan which is based on the CD Strategy.			
1.8 Elaborate CD training plan on participatory forest and rangeland management for NRWGO staff.			
1.9 Implement CD training plan for participatory forest & rangeland management for NRWGO staff.			
1.1 Monitor on impact of CD training plan and feed back among NRWGO staffs.			
1.11 Prepare materials for dissemination of the project (brochure, site visit schedule, etc.) including preparation for site visitor.			
2.1 Identify target villages for participatory forest & rangeland management, and introduction of alternative income source.			
2.2 Identify and organize residents organization which is able to work with government organizations in target villages.			
2.3 Prepare training plan for Community Facilitator (CF) who will assist Village Action Plan (VAP)*3.			
2.4 Hold CF coordination meetings.			
2.5 Identify and support of appropriate fundraising methods for target area.			
2.6 Implement the trainings for CFs.			
2.7 Monitor, evaluate and obtain feedback of the trainings by CF training participants.			
3.1 Prepare VAP for participatory forest and rangeland management activities based on present condition of target villages.			
3.2 Discuss and agree common target/goal and necessary VAP for sustainable use and protecting Model Plots*4 with local residents of target villages.			
3.3 Implement activities which contribute for watershed management, based on the agreed VAP, such as regeneration and conservation activities by the residents, agro-forestry, soil erosion control, tree planting, and alternative income source activities etc..			
3.4 Monitor, evaluate and obtain feedback on activities by VAP participants.			
3.5 Based on the above activities, prepare a guideline for participatory forest and rangeland management.			
3.6 Analyze and categorize VAP activities which have been implemented.			
3.7 Based on the activities above and site survey and discussion, revise the participatory forest and rangeland management guideline.			
4.1 Study and analyze for structuring collaborative relations with other organizations concerned.			
4.2 Hold session aiming to getting awareness of concerned organizations on the conditions and challenges of forest and rangeland in target area.			
4.3 Hold collaboration strengthening meetings with concerned organizations.			
4.4 Prepare proposal regarding collaboration strengthening among concerned organizations.			

*1 "Participatory Forest and Rangeland Management" is protection, utilization and regeneration of forest and rangeland through participation and support of the people living nearby forest and rangeland

*2 "Capacity Development (CD)" is the process in which problem- managing skills are enhanced collectively at individual, organizational and societal levels.

*3 "Village Action Plan (VAP)" contains the detailed design of activities for alternative income source that each target village will implement by applying the participatory methodology

*4 "Model Plot" refers to the plots used for implementation of different plans (such plans as protected area establishment, Check- dam construction and orchard establishment etc.)

Table 1-4 PDM at the 2nd JCC in extended phase

Project Design Matrix

Project Title: The Participatory Forest and Rangeland Management Project in Chaharmahal- va- Bakhtiari Province

Version: 8.1

Supervising Agency: Forest, Rangeland and Watershed Management Organization (FRWO)

Dated: 6 February, 2016

Implementing Agency: Natural Resources and Watershed Management General Office (NRWGO)

Direct Beneficiaries: Staff of NRWGO Chaharmahal-va-Bakhtiari Province. Indirect Beneficiaries: Residents of Target Villages

Target Areas: 1) Chaharmahal- va- Bakhtiari Province, 2) Target Villages in Bazoft Area

Project Period: Six and half a year (6.5 Year) from June 2010 to December 2016 (Extension Period: from June 2015 to December 2016)

Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall Goal			
Participatory forest and rangeland management*1 is introduced in Chaharmahal-va-Bakhtiari Province	<ol style="list-style-type: none"> 1 Participatory forest and rangeland management activities in the target area are maintained, by using knowledge and experience gained from the project. 2 Participatory forest and rangeland management activities are newly introduced at least in 5 sites in district level. 	1 Monitoring report of NRWGO	There is no role change of NRWGO
Project Purpose			
The capacity of NRWGO for participatory forest and rangeland management is enhanced.	<ol style="list-style-type: none"> 1 More than 70% of project participants in NRWGO will utilize knowledge/experience gained from the Project. 2 More than 70% of project participants in target villages will value that NRWGO's capacity of forest & rangeland management was enhanced and NRWGO attitudes was improved. 3 70% of project participants in target villages will be benefited by the Project by December, 2014. 4 Implementation system for participatory forest and rangeland management collaborated with concerned organizations is formulated by NRWGO. 		Substantial number of trained NRWGO staff will not leave the project.
Outputs			
1 Based on Capacity Development (CD)*2 Strategy for NRWGO, participatory forest and rangeland management system of NRWGO is prepared.	<ol style="list-style-type: none"> 1 Capacity Development Strategy report will be prepared by December, 2012. 2 At least 5 CD modules will be conducted every year. 3 At least 60% of NRWGO technical staff will participate in CD program. 4 50% of participants, who have attended "PCM, PRA, Participatory method" module, in CD program have drafted/drafting at least a project design and/or a proposal. 5 Capacity Development strategy action plan is formulated under the initiative of Iranian side and is endorsed by NRWGO. 6 More than 2/3 of NRWGO staff who receive training course achieve more than 4 understanding level in 5 categorized understanding levels. 	<ol style="list-style-type: none"> 1 Revised Capacity Development Strategy 2 Capacity Development Strategy report 3 Project reports 4 CD Strategy action plan 5 Evaluation form in each training course 	<ol style="list-style-type: none"> ① There is no major policy change in forestry management, community development and capacity development of FRWO/ NRWGO.
2 Implementation system for sustainable participatory forest and rangeland management in the target villages is prepared and strengthened.	<ol style="list-style-type: none"> 1 Training program for CF candidate at least 5 persons in each village are initiated by December, 2012. 2 70% of necessary number of CFs for VAP sub-project activities will be maintained by December, 2014. 3 Each CF capacity is 1 rank upper than before in 5 categories defined by the project. 4 At least 1 activity funded by Iranian side is implemented 	<ol style="list-style-type: none"> 1 Training program for community facilitators 2 Results of questionnaire to CFs 3 Project reports 	<ol style="list-style-type: none"> ② There is no serious natural disaster which prevents regeneration of forest & rangeland, and introduction of alternative income source.
3 Participatory forest and rangeland management activities in the target villages are promoted.	<ol style="list-style-type: none"> 1 75% of newly created Model Plots will achieve the purpose of establishment and maintained by December, 2014. 2 75% of newly created Model Plots are evaluated that vegetation is recovered by December, 2014. 3 At least one (1) Village Action Plan will be conducted in each target village by December, 2014. 4 50% of participants of sub-projects will be wanted to continue their activities after this project. 5 Participatory forest and rangeland management models in national land are formulated. 6 Villagers evaluate that illegal invasions from outside are decreased. 	<ol style="list-style-type: none"> 1 Forest & Rangeland Regeneration Plan 2 Project reports 3 Village Action Plan (VAP) 	<ol style="list-style-type: none"> ③ There is no serious economic recession in Iran.
4 Toward the sustainable participatory forest and rangeland management activities, collaborative relation among concerned organizations is structured.	<ol style="list-style-type: none"> 1 More than 3 times of collaboration strengthen meeting are held. 2 Proposal regarding collaboration strengthening is accepted by NRWGO. 	1 Project reports	

Activities	Inputs		
1.1 Understand natural conditions and socio-economic situations of target areas.			
1.2 Understand problem and initiative for participatory forest & rangeland management.			
1.3 Understand ongoing activities of similar projects in and out of the target area and extract lessons & learns by analyzing previous similar projects.			① There is no increase in poverty rate in target areas.
1.4 Based on the information and data obtained, prepare Project Baseline Survey Report.			② There is no big fluctuation in livestock price in target areas.
1.5 Elaborate the CD Strategy for NRWGO.			③ Policy makers and decision makers understand the importance of target areas.
1.6 Revise the CD Strategy focused on extension of the participatory forest and rangeland management.	Japan Side	Iran Side	
1.7 Discuss about the action plan which is based on the CD Strategy.	<ol style="list-style-type: none"> (1) Experts 1) Chief Advisor 2) Participatory Community Development 3) Capacity Development/ Training 4) Participatory Forest & Rangeland Management 5) Project Coordinator 6) Inter-Organizational Strengthening Advisor 	<ol style="list-style-type: none"> (1) Counterparts and other staffs 1) Project Director 2) Project Manager 3) Deputy Project Manager 4) Project Coordinator 5) Counterpart staffs in; <ul style="list-style-type: none"> ①FRWO(Tehran) ②NRWGO(Shahrekord) ③NRWGO(Koohrang) ④NRWGO Field Office (Bazoft) 6) Administrative staff for project implementation 	
1.8 Elaborate CD training plan on participatory forest and rangeland management for NRWGO staff.			
1.9 Implement CD training plan for participatory forest & rangeland management for NRWGO staff.			
1.10 Monitor on impact of CD training plan and feed back among NRWGO staffs.			
1.11 Prepare materials for dissemination of the project (brochure, site visit schedule, etc.) including preparation for site visitor.			
2.1 Identify target villages for participatory forest & rangeland management, and introduction of alternative income source.			
2.2 Identify and organize residents organization which is able to work with government organizations in target villages.			
2.3 Prepare training plan for Community Facilitator (CF) who will assist Village Action Plan (VAP)*3.			
2.4 Hold CF coordination meetings.			
2.5 Identify and support of appropriate fundraising methods for target area.			
2.6 Implement the trainings for CFs.			
2.7 Monitor, evaluate and obtain feedback of the trainings by CF training participants.			
3.1 Prepare VAP for participatory forest and rangeland management activities based on present condition of target villages.			
3.2 Discuss and agree common target/goal and necessary VAP for sustainable use and protecting Model Plots*4 with local residents of target villages.			
3.3 Implement activities which contribute for watershed management, based on the agreed VAP, such as regeneration and conservation activities by the residents, agro-forestry, soil erosion control, tree planting, and alternative income source activities etc..			
3.4 Monitor, evaluate and obtain feedback on activities by VAP participants.			
3.5 Based on the above activities, prepare a guideline for participatory forest and rangeland management.			
3.6 Analyze and categorize VAP activities which have been implemented.			
3.7 Based on the activities above and site survey and discussion, revise the participatory forest and rangeland management guideline.			
4.1 Study and analyze for structuring collaborative relations with other organizations concerned.			
4.2 Hold session aiming to getting awareness of concerned organizations on the conditions and challenges of forest and rangeland in target area.			
4.3 Hold collaboration strengthening meetings with concerned organizations.			
4.4 Prepare proposal regarding collaboration strengthening among concerned organizations.			

*1 "Participatory Forest and Rangeland Management" is protection, utilization and regeneration of forest and rangeland through participation and support of the people living nearby forest and rangeland

*2 "Capacity Development (CD)" is the process in which problem- managing skills are enhanced collectively at individual, organizational and societal levels.

*3 "Village Action Plan (VAP)" contains the detailed design of activities for alternative income source that each target village will implement by applying the participatory methodology

*4 "Model Plot" refers to the plots used for implementation of different plans (such plans as protected area establishment, Check- dam construction and orchard establishment etc.)

1.5 Project schedule and flow

The flow chart and schedule of the project from the 1st year to 5th year is below.

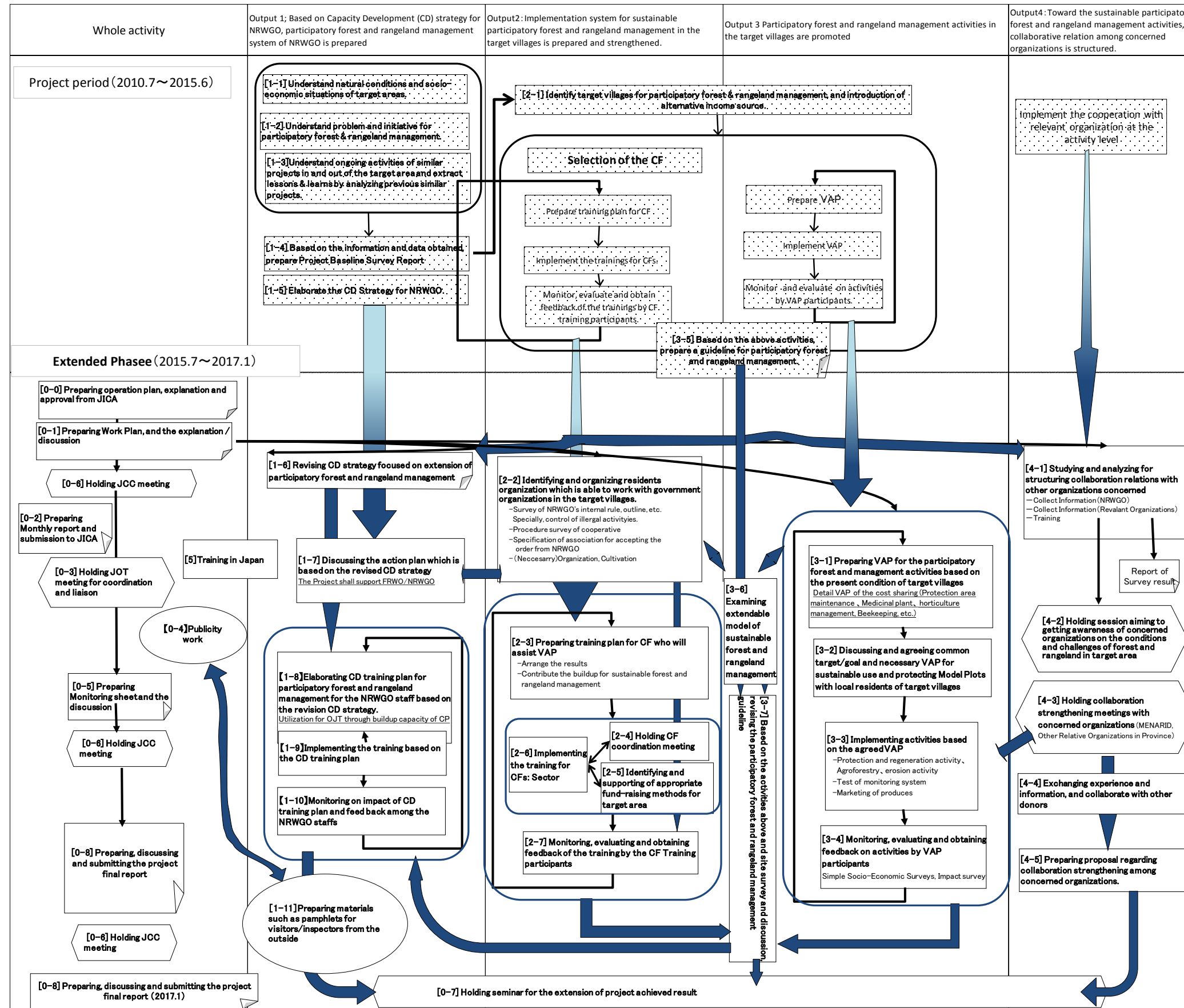


図 1-3 Flow chart for implementation

Table 1-5 Plan of Operation (Activities Schedule)

Plan of Operation

Version: 3

Dated: 16 December, 2016

Project Title: The Participatory Forest and Rangeland Management Project in Chaharmahal-va-Bakhtiari Province

Inputs		Year	2010 1st Year (2011)				2nd Year (2012)				3rd Year (2013)				4th Year (2014)				5th Year (2015)				6th Year (2016)				7th Year (2017)				Remarks	
			I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
Expert		Plan																														
Seiichi MISHIMA (Chief adviser/ Participatory Forest&Rangeland Management(1))		Actual																														
Kazuhisa KATO (Vice Chief Advisor / Institutional Strengthening and Coherence)		Plan																														
Atsushi HISAMICHI (Participatory Forest&Rangeland Management(2))		Actual																														
G.SHOKOHIFARD (Participatory Community Development(1))		Plan																														
Saori TAKEI (Participatory Community Development(2) /Coordinator)		Actual																														
Osman ATEF (Capacity Development/Training(1))		Plan																														
Shoichi YAMASHITA (Capacity Development/Training)		Actual																														
***** (Chief adviser/ Participatory Forest&Rangeland Management(1))		Plan																														
***** (Accompany CP Training/office work related Japan training)		Actual																														
Equipment		Plan																														
Equipment necessary for the Pilot Activities will be provided		Actual																														
Training in Japan		Plan																														
		Actual																														
			1st training from 1/4/2016 to 18/8/2016, 2nd training from 1/8/2016 to 10/8/2016 is canceled																													
Activities		Year	2010 1st Year (2011)				2nd Year (2012)				3rd Year (2013)				4th Year (2014)				5th Year (2015)				6th Year (2016)				7th Year (2017)				Responsible Organization	
Sub-Activities			I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	Japan	IRAN
Output 1: Based on Capacity Development (CD) Strategy for NRWGO, participatory forest and rangeland management system of NRWGO is prepared.																																
1.1 Understand natural conditions and socio-economic situations of target areas.		Plan																														
		Actual																														
1.2 Understand problem and initiative for participatory forest & rangeland management.		Plan																														
		Actual																														
1.3 Understand ongoing activities of similar projects in and out of the target area and extract lessons & learns by analyzing previous similar projects.		Plan																														
		Actual																														
1.4 Based on the information and data obtained, prepare Project Baseline Survey Report.		Plan																														
		Actual																														
1.5 Elaborate the CD Strategy for NRWGO.		Plan																														
		Actual																														
1.6 Revise the CD Strategy focused on extension of the participatory forest and rangeland management.		Plan																														
		Actual																														
1.7 Discuss about the action plan which is based on the CD Strategy.		Plan																														
		Actual																														
1.8 Elaborate CD training plan on participatory forest and rangeland management for NRWGO staff.		Plan																														
		Actual																														
1.9 Implement CD training plan for participatory forest & rangeland management for NRWGO staff.		Plan																														
		Actual																														
1.10 Monitor on impact of CD training plan and feedback among NRWGO staffs.		Plan																														
		Actual																														
1.11 Prepare materials for dissemination of the project (brochure, site visit schedule, etc.) including preparation for site visitor.		Plan																														
		Actual																														

Output 2: Implementation system for sustainable participatory forest and rangeland management in the target villages is prepared and strengthened.						7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3					
2.1 Identify target villages for participatory forest & rangeland management, and introduction of alternative income source.	Plan																														
	Actual																														
2.2 Identify and organize residents organization which is able to work with government organizations in target villages.	Plan																														
	Actual																														
2.3 Prepare training plan for Community Facilitator (CF) who will assist Village Action Plan (VAP)*3.	Plan																														
	Actual																														
2.4 Hold CF coordination meetings.	Plan																														
	Actual																														
2.5 Identify and support of appropriate fundraising methods for target area.	Plan																														
	Actual																														
2.6 Implement the trainings for CFs.	Plan																														
	Actual																														
2.7 Monitor, evaluate and obtain feedback of the trainings by CF training participants.	Plan																														
	Actual																														
Output 3: Participatory forest and rangeland management activities in the target villages are promoted.						7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3					
3.1 Prepare VAP for participatory forest and rangeland management activities based on present condition of target villages. <small>Discuss and agree common target goal and necessary VAP for</small>	Plan																														
	Actual																														
3.2 sustainable use and protecting Model Plots*4 with local residents of target villages	Plan																														
	Actual																														
3.3 Implement activities which contribute for watershed management, based on the agreed VAP, such as regeneration and conservation activities by the residents, agro-forestry, soil erosion control, tree planting, and alternative income source activities etc..	Plan																														
	Actual																														
3.4 Monitor, evaluate and obtain feedback on activities by VAP participants.	Plan																														
	Actual																														
3.5 Based on the above activities, prepare a guideline for participatory forest and rangeland management.	Plan																														
	Actual																														
3.6 Analyze and categorize VAP activities which have been implemented.	Plan																														
	Actual																														
3.7 Based on the activities above and site survey and discussion, revise the participatory forest and rangeland management guideline.	Plan																														
	Actual																														
Output 4: Toward the sustainable participatory forest and rangeland management activities, collaborative relation among concerned organizations is structured.						7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3					
4.1 Study and analyze for structuring collaborative relations with other organizations concerned.	Plan																														
	Actual																														
4.2 Hold session aiming to getting awareness of concerned organizations on the conditions and challenges of forest and rangeland in target area.	Plan																														
	Actual																														
4.3 Hold collaboration strengthening meetings with concerned organizations.	Plan																														
	Actual																														
4.4 Prepare proposal regarding collaboration strengthening among concerned organizations.	Plan																														
	Actual																														
Duration / Phasing		Plan	Implementation																				Extended Phase								
Monitoring Plan		Year	2010 1st Year (2011)				2nd Year (2012)				3rd Year (2013)				4th Year (2014)				5th Year (2015)				6th Year (2016)				7th Year (2017)				Remarks
Monitoring			I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
Set-up the Detailed Plan of Operation		Plan																													
Submission of Monitoring Sheet		Plan																													
Monitoring Mission from Japan		Plan																													
Joint Monitoring		Plan																													
Reports/Documents		Plan																													
Project Completion Report		Plan																													
Public Relations		Plan																													
Project Brochure		Plan																													
Newsletter		Plan																													
Project Website		Plan																													
Committee		Plan																													
JOT		Plan																													
JCC		Plan																													

1.6 Implementation structure of project

(1) Counterpart organization

Counterpart organizations include the Forest Rangeland Watershed Management Organization (FRWO), located in Tehran and the Chaharmahal-va-Bakhtiari Province Natural Resources Watershed Management General Organization (NRWGO). Three of the counterpart personnel, including the Project director, are assigned in FRWO in Tehran. Although eight of the counterpart personnel, including project managers, were initially assigned to NRWGO, in 2015, 12 of the counterpart personnel were assigned. The Project office is situated in NRWGO in Shahrekord, the capital of Chaharmahal-va-Bakhtiari Province and in the Bazoft area office (NRWO) to implement the pilot projects. The JICA experts provided guidance for the NRWGO staff, while the pilot projects were carried out in five target villages in the Bazoft area and training was provided for personnel in and around the NRWGO training room in Shahrekord.

The Project is managed with a PDM/PO and a Joint Coordinating Committee (JCC) agreed in an R/D. One to three times per year, the PDM/PO is reviewed and revised based on experts and C/P operation. The Project implementation structure and organization system, including the JCC, are shown below.

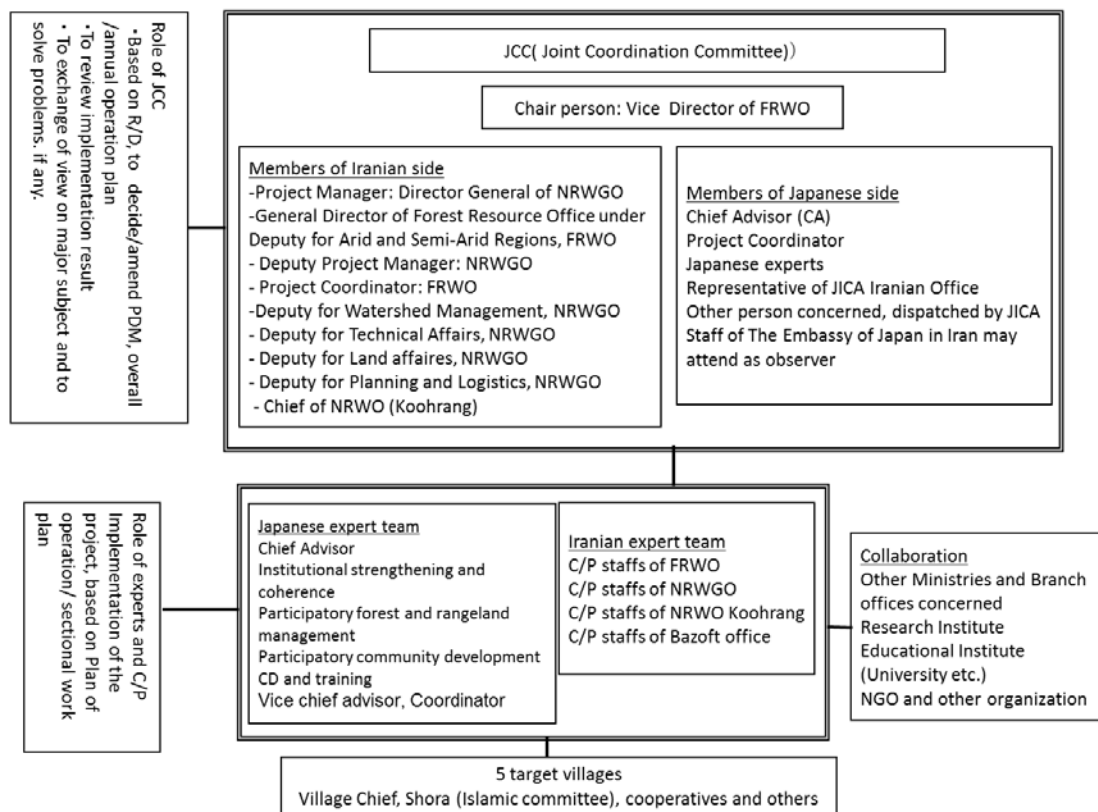


Figure 1-4 The Project implementation structure

FRWO integrated the watershed management department with the arid and semi-arid land department in 2011 whereupon it became the watershed management and arid and semi-arid land department. Along with the organizational reform of FRWO, a watershed management deputy was assigned as a watershed management and arid and semi-arid land department deputy as the Project director. It should be noted that an organization reform proposal to merge FRWO into the Ministry of the Environment was said to have been deliberated in national parliament, but the merger remained pending.

There is no change in the headquarters organization of NRWGO in 2010-2015. However, some branch offices of NRWGO on a district level increased, despite the reduced number of staff in the meantime.

The employment period of staff of FRWO/NRWGO is 30 years under their employment and retirement system, (which seems to have been extended by two-three years depending on the educational background). Since fewer staff were newly recruited than the number retiring, the overall staff strength has been declining. This has meant a corresponding increase in individual workloads. To cope, measures such as delaying the retirement age and employing temporary workers and outsourcing works have been devised.

(2) Beneficiaries

The staff of Natural Resource and Watershed Management General Office (NRWGO) of Chaharmahal-va-Bakhtiari Province

Villagers in target villages in Bazoft area, Koohrang district, Chaharmahal-va-Bakhtiari Province
 Tehran - Shahrekord Distance 550km

Overland Route: Tehran-Qom-Esfahan-Shahrekord 7 hours by car

Air Route: Tehran-Esfahan 1 hour flight and Esfahan-Shahrekord 2 hours by car

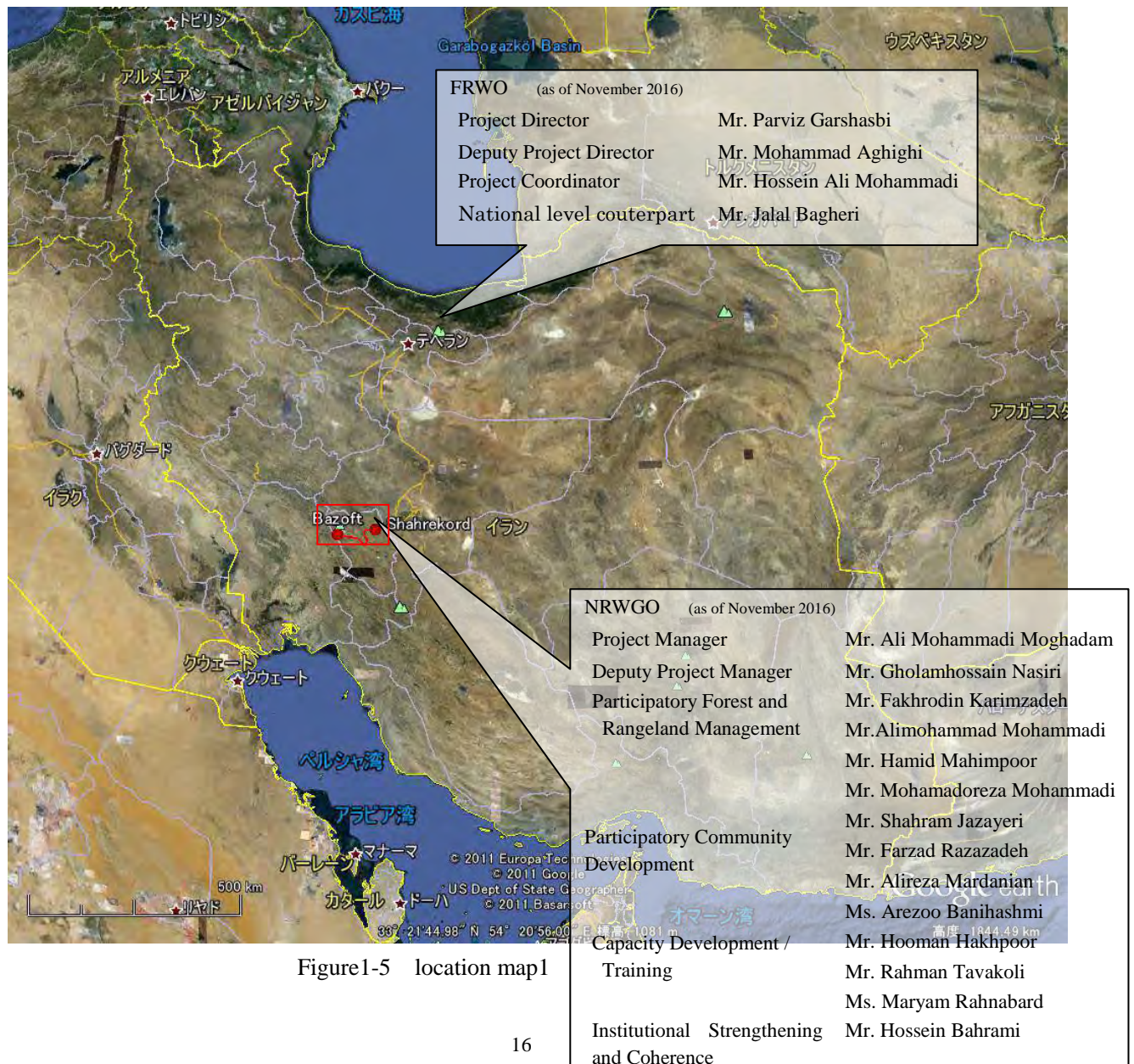


Figure1-5 location map1

Shahrekord – Koohrang Distance 90km - 1.5 hours by car

Shahrekord – Bazoft (red line) Distance 150km - 3.5 hours by car (Elevation of Chery Pass is 2,800m)

Koohrang – Bazoft Distance 105km - 2 hours by car

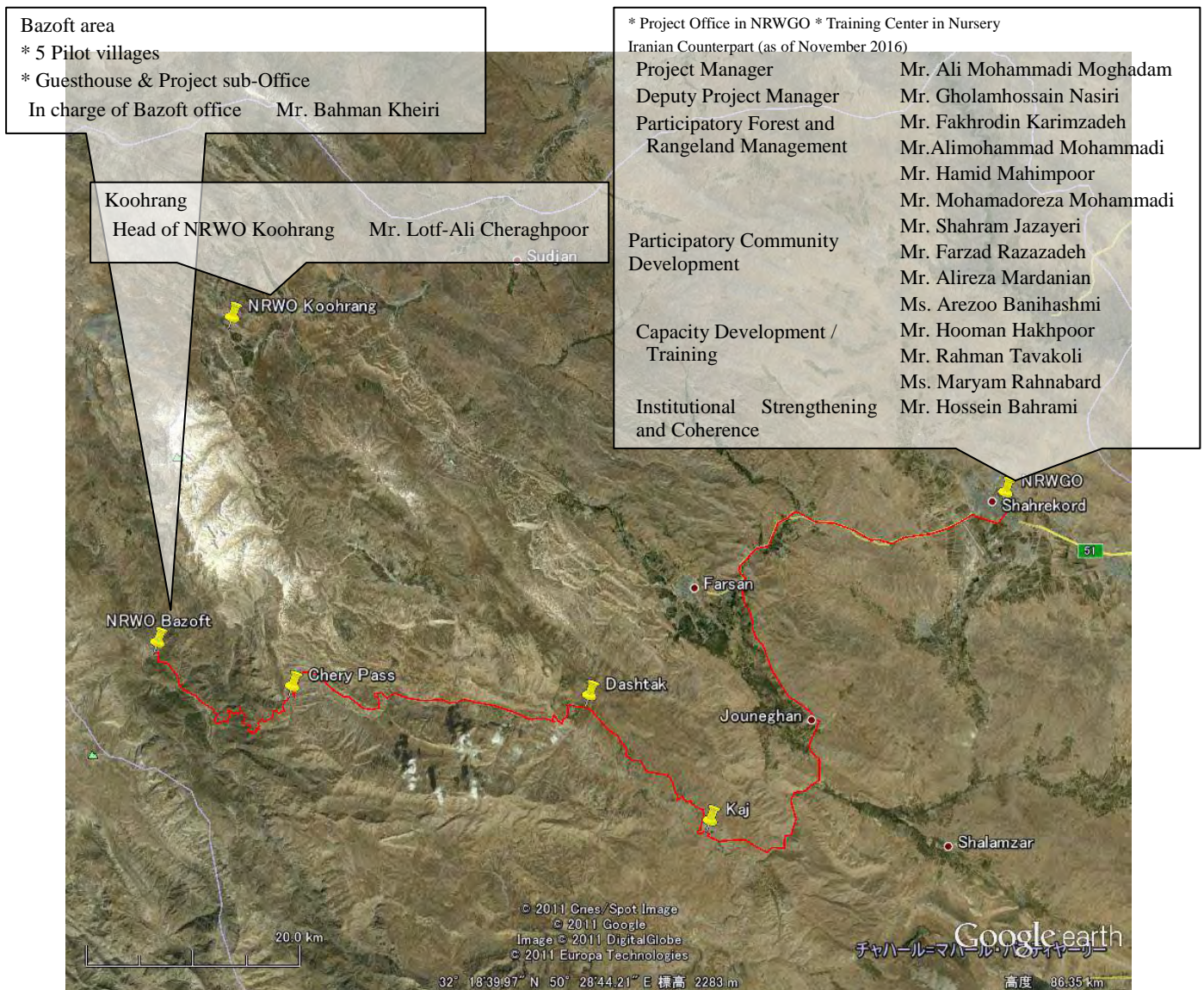


Figure 1-6 location map2

Table 1.6-1 Name List of the project concerned Location

	In the alphabet	Category	Location
1	Shahrekord	City	Center of Chaharmahal-va-Bakhtiari province, location of the project office
2	Koohrang	District	NRWO which control Bazoft area
3	Bazoft	Area	Name of pilot area
4	Telurd	Village	Location of NRWO Bazoft office
5	Chaman Goli	Village	Center of Bazoft area (left bank of Bazoft river)
6	Cham Gale	Village	Center of Bazoft area (right bank of Bazoft river)
7	Gazestan	Village	Pilot village
8	Tabarak Sofla	Village	Pilot village
9	Tarom	Village	Pilot village
10	Robotkoh	Sub-village	Pilot village (seasonal nomads settlement)
11	Durak Sofla	Village	Pilot village
12	Mazerashte	Village	Pilot village

CHAPTER 2 ACHIEVED RESULTS OF THE PROJECT

2.1 Progress of Achieved results of the Project

PDM was revised based on the recommendation of the final evaluation conducted in the fifth year (refer to 1.4.3). In this chapter, the written rules for the terms “output” and “indicator” are as follows: “ex-” is added from PDM ver. 4, while from PDM ver. 8 just the terms themselves are written.

On Output 1, ex-output1 “The Capacity Development Strategy for NRWGO is indicated” and ex-output4 “The Capacity Development Plan for NRWGO with regard to participatory forest and rangeland management is formulated/implemented.” were rearranged and output1 “Based on Capacity Development Strategy for NRWGO, participatory forest and rangeland management system of NRWGO is prepared” was newly created.

On output2 and output3, ex-output2 “Regeneration of forest and rangeland is promoted in the target villages” and ex-output3 “Alternative income source for forest and rangeland conservation are introduced in the target villages” were merged and rearranged, gathering items related to the implementation structure, output2 “Implementation system for sustainable participatory forest and rangeland management in the target villages is prepared and strengthened” was newly made and items gathered on related activities in the villages concerned while output3 “Participatory forest and rangeland management activities in the target villages are promoted” was newly made.

Output4 was newly created, with the scope of sustainability and to strengthen organizational coherence, while output4 “Toward the sustainable participatory forest and rangeland management activities, collaborative relation among concerned organizations is structured” was added.

The project purpose of the PDM ver. 8 remained unchanged, but one indicator was introduced.

2.1.1 Output1: Based on the Capacity Development (CD) Strategy for NRWGO, a participatory forest and rangeland management system of NRWGO is prepared.

2.1.1.1 Achievement from first to fifth year

During the final evaluation carried out in the fifth year, the Project was evaluated based on PDM ver. 4. Ex-indicator1.1 “Capacity Development Strategy report will be prepared by December 2012” in ex-output1 was judged as achieved as the CD strategy document was drafted by November 2011.

Indicators of ex-output4, ex-indicator4.1 “At least 5 CD modules will be conducted every year” was judged as achieved, because at least five training module were implemented, as specified in “2.2.2 Output 1 activities”. Ex-indicator4.2 “At least 60% of NRWGO technical staff will participate in the CD program” was judged as achieved, because the accumulated number of trainees over five years was 170 persons, including 154 staff (official and temporary) of NRWGO in Chahalmahal-va-Bakhtiari Province.

Ex-indicator4.3 “50% of participants, who have attended “PCM, PRA, Participatory method module, in CD program have drafted or are drafting at least a project design and/or a proposal” was considered impossible to evaluate because the indicator was not set appropriately.

2.1.1.2 Achievement of the extended phase

Indicator1.5 “A Capacity Development strategy action plan is formulated under the initiative of the Iranian side and endorsed by NRWGO” and indicator1.6 “More than 2/3 of NRWGO staff who receive training course achieved an understanding level of more than 4 in 5 categories of understanding.” were

added to the new output1 during the extended phase

As activities under output1, a revised CD strategy was prepared and endorsed by JCC in October, 2015. An action plan for the CD strategy was drafted and budget codes related to participatory activities were approved by the provincial PBO. Accordingly indicator 1.5 was deemed achieved.

Concerning indicator 1.6, a questionnaire survey was conducted to monitor, evaluate and gain feedback in every training session. The results indicated that more than 93% of trainees evaluated the course as valuable and all training sessions as easily understandable. However, no indicator data for measuring an understanding level of “more than 4 in 5 categories of understanding” was collected.

2.1.1.3 Summary of achievement level

Given that four of the six indicators were achieved, we can say that output1 was achieved overall. In particular, from the implementation purpose perspective, given that the action plan concerned participatory forest and the rangeland management budget was drafted by NRWGO, submitted to the provincial PBO for application of the budget and approved, this means the achievement can be considered to have exceeded the initial target. Moreover, concerning the preparation of the implementation system required, the establishment and management of a “Participatory Projects Coordination Committee (PCC) and MENARID, Participatory National land Protection Project (PPP), etc. participated in the PCC meeting and it is expected that PCC will effectively achieve the targeted level.

Moreover, staff training is gradually conducted under the initiative of the NRWGO Extension office. In particular, the relevant NRWGO section has collaborated to conduct training courses in “Forest and rangeland firefighting“ and “Illegal activities control” for field operational staff in local offices, while the capacity of NRWFO staff and the organization itself has been developed. Furthermore, NRWGO experts (C/Ps) who have been working with JICA experts play roles as advisors in participatory projects of other sections and the C/P can train other staff with an OJT base. A technical transfer was also organized to develop staff capacity.

2.1.2 Output2: Implementation system for sustainable participatory forest and rangeland management in the target villages was prepared and strengthened.

2.1.2.1 Achievement from first to fifth year

The final evaluation in the fifth year evaluated based on PDM ver. 4, e-indicator3.1 of ex-outout3 “A training program for CF candidate involving at least five people in each village to be initiated by December, 2012” was deemed “partially achieved” because training on the necessary topics for CF was conducted but the number of trainees did not meet the requirement of “at least five people per village” On ex-indicator3.2 of ex-output3 “70% of the necessary number of CFs for VAP sub-project activities will be maintained by December 2014”, although the number of CFs fluctuated, the necessary number of CFs was active in conducting VAP activities at the time of final evaluation, so the indicator was deemed “achieved”

2.1.2.2 Achievement of the extended phase

Two indicators were added to the new output2 during the extended phase, indicator2.3 “Each CF capacity is one rank up from before in the five categories defined by the project” and indicator2.4; “At least one activity funded by the Iranian side is implemented”.

On indicator 2.3, a capacity monitoring survey on five items, overall coordination ability,

links/connections with NRWGOs, knowledge of natural resources in the village, communication ability with other villagers, satisfaction and achievements on activities was conducted at February, 2016 and at the end of November, 2016.

As a result, there was an increase of 0.9 point for links/connections with NRWGO, 0.7 point for communication ability with other villagers and 0.35 for the average score of total items. The indicator score did not move one rank up, because the survey interval was only nine months and the fact that after the five years of project activities, CF's ability had already comparatively developed from the start. Moreover, the Project experts evaluated that the CF's ability had developed.

Indicator 2.4 covered various Iranian funding sources, such as bank loans, government subsidies, villagers' own money, etc. and microcredit funds were assumed to be most appropriate for the village. It was confirmed that microcredit funds in villages were surely re-invested in activities to improve livelihood, such as beekeeping, sewing and poultry farming, etc. Such activities were very active, NRWGO donated for the microcredit boxes, two in Gazestern village and one in Tabarack Spfla village. Other than the microcredit activities, the rangeland office, watershed department and the Project jointly subsidized the promotion of medicinal plants and activity to cultivate wild vegetables in the villages. The forest office, JAO, villagers and the Project also jointly invested in an activity to cultivate pomegranates. From the above examples, many activities were initiated by funds on the Iranian side, hence the indicator was clearly achieved.

2.1.2.3 Summary of achieved level

Two of the four indicators were achieved and although the remaining two indicators were not achieved, activities at field level did not involve critical problems, so it could be evaluated that the implementation system for sustainable participatory forest and rangeland management in the target villages had been prepared and strengthened. In particular, since the CF training plan had been approved in JOT and as well as the Project, the NRWGO training office and MENARID had also joined forces and cooperated, the connection between the target villages and NRWGO was strengthened. Again, many activities have been started by Iranian funding as mentioned above. It is easy to envisage that from now on, the implementation system will be prepared and strengthened.

2.1.3 Output3: Participatory forest and rangeland management activities in the target villages are promoted.

2.1.3.1 Achievement from first to fifth year

The final evaluation in the fifth project year evaluated based on PDM ver. 4 Ex-indicator2.1 of ex-output2 "75% of the newly created Model Plots will achieve the purpose of establishment and maintained by December 2014", ex-indicator2.2 of ex-output2 "75% of newly created Model Plots evaluate vegetation as recovered by December 2014", ex-indicator3.3 of ex-output3 "At least one Village Action Plan will be conducted in each target village by December 2014" and ex-indicator3.4 of ex-output3 "50% of participants in sub-projects will want to continue their activities after this project" were investigated.

In conclusion, on ex-indicator2.1, since protected areas of forest and rangeland for regeneration promotion were well maintained in the five target villages, the relevant indicator was achieved. Moreover, on ex-indicator2.2., the recovery of vegetation in all protection areas was confirmed. Since achieving perfect

regeneration of the forest takes considerable time, the vegetation recovery was evaluated as sufficient within the project term.

On ex-indicator3.3, VAPs were agreed and signed among representatives of villagers, experts of NRWGO and JICA in each activity and some of villagers had already benefited from harvested orchard and beekeeping production. Even so, the contents of activities were selected based on the needs of the target villages, which meant some activities were not under the control of NRWGO and supported by other organizations.

On ex-indicator3.4, all the participants in the activities had hoped to continue the activities by themselves, so the purpose of the indicator was achieved

2.1.3.2 Achievement of the extended phase

In PDM ver. 8, a new indicator3.5 “Participatory forest and rangeland management models in national land are formulated.” and a new indicator3.6 “Villagers evaluate that illegal invasions from outside are decreased” were added.

On indicator3.5, through practicing concrete activities in the target villages, modeling was done. During the extended phase in particular, a pomegranate cultivation project to conserve the protected area, establishment of a highland rangeland permanent monitoring plot, marketing support activities, etc., were implemented under mutual consensus with villagers. Moreover, when revising the guideline, some activities and operations were analyzed and classified for model-making and included in the revised participatory forest and rangeland management guidelines.

On indicator3.6, interviews with villagers took place and two villages evaluated the result as “reduced invasion”; Tabarack Sofla village took some measures to be reconciled with nomad and Gazestern village prevented invasion with a powerful guard. While two villages evaluated that “invasion existed”; Durak Sofla village was subject to invasion from outside the village and Mazerashte village was subject to invasion from insiders in the village. Because the Tarom village protected area had already been transferred to NRWGO, the project concerned two villages having replied “invasion decreased” among the four villages.

2.1.3.3 Summary of achieved level

Five among the six indicators were achieved, thus participatory forest and rangeland management activities in the target villages are promoted. Since evaluation on invasion of the protected area as the indicator was not achieved, it was making hard to control invaders because invaders are relatives. Moreover, regarding sustainability, to continue activities in future, the participatory forest and rangeland management guideline, compiling activities to be implemented in villages, was revised based on opinions from NRWGO in the province and from NRWGO in the Zagros area, to secure sustainability.

2.1.4 Output4: Toward sustainable participatory forest and rangeland management activities, collaborative relation among concerned organizations is structured.

2.1.4.1 Achievement from first to fifth year

As described above, activities had not implemented activities on Output 4 in PDM ver. 8. In reality however, the community development sector of the Project strove to collaborate with JAO, the Agriculture Training Center and the Technical Vocational Training Organization (TVTO) and consult with the provincial government, etc. Moreover, the planning and logistic division of NRWGO continuously requested and consulted with the provincial government and PBO of the province on a budget for

participatory activities.

A strategy to continue the Project activities by FRWO/NRWGO was placed on the agenda during the first JCC of the fifth years and discussed. Following the JCC discussion, the Project submitted information of the policy on participation of the Project to the provincial deputy governor for planning and budget, etc., keeping in mind the need to secure community development budgets, for which allocating a budget under FRWO/NRWGO would be difficult.

Moreover, coping with the mutual collaboration trend, such as requests for the participation of JICA experts from watershed departments in NRWGO, MENARID - UNDP projects, In particular for MENARID, within the project framework of staff training, interaction among the parties concerned and support to develop participatory capacity was implemented.

2.1.4.2 Achievement of the extended phase

Indicator4.1 “Meetings to strengthen collaboration were held more than three times.” and indicator4.2 “Proposals regarding collaboration strengthening were accepted by NRWGO” were added in the new output4 of the PDM ver. 8.

On indicator4.1, a total of more than six meetings to strengthen collaboration were held with provincial PBO, JAO and Iran Cultural Heritage, Handicraft and Tourism Organization (CHHTO). The planning and logistic division of NRWGO in particular also held a series of meetings with provincial PBO very actively, to gain a budget code² for participatory forest and rangeland management. Once both institutional cooperation and also internal cooperation in NRWGO had been confirmed, the PCC was established in NRWGO and a total of four meetings were held. This means a total of more than ten collaboration strengthening meetings took place, hence the indicator was achieved.

On indicator4.2, in consideration of the current trend, whereby the Integrated Watershed Management (IWM) scheme is being rolled out as an FRWO/NRWGO policy and project and the IWM project plan to promote the structured system for a means of institutional coherence developed by MENARID, to collaborate with other organizations more efficiently and effectively, the project shall propose institutional coherence focusing on activation already established under the system and how to implement it more effectively. The policy was proposed and approved in the third JCC during the extended phase, thus the indicator was achieved.

2.1.4.3 Summary of achieved level

Both the indicators of Output4 were achieved. From the operational perspective, to secure sustainability, the establishment of an internal structure for internal collaboration was prioritized and collaboration and coherence among concerned organizations was handled as required arise to limit the number of committees, while deciding to apply the MENARID institutional coherence system in future. On the whole, collaboration on budgets with the provincial PBO was realized and the project was adopted as an IWM project under current policy, meaning a realistic target could be considered achieved.

² Budget item with composed project contents and costs by each project.

2.1.5 Project Purpose: The capacity of NRWGO for participatory forest and rangeland management is enhanced.

2.1.5.1 Achievement from the first to fifth year

From the first to the fifth year, the following three indicators were evaluated and deemed mostly achieved, but the project also revealed remaining anxiety over sustainability.

On ex-indicator1 “More than 70% of project participants in NRWGO will utilize knowledge/experience gained from the Project”, key counterparts used them frequently, while staff who attended training involving lectures only could not be said to have used them completely so this was evaluated as partly achieved.

On ex-indicator2 “More than 70% of project participants in target villages will value that the NRWGO's capacity of forest & rangeland management has been enhanced and NRWGO attitudes was improved”, all villagers evaluated that collaboration with NRWGO had been promoted so this indicator was achieved.

On ex-indicator3 “70% of project participants in target villages will benefit from the Project by December, 2014”, though the villagers experienced a feeling of anxiety regarding the sustainability of the activities by themselves, the villagers having participated in the project had a definite feelings of benefiting from it, so the indicator was achieved.

2.1.5.2 Achievement of the extended phase

Indicator4 “Implementation system for participatory forest and rangeland management collaborated with concerned organizations is formulated by NRWGO”, was added. As stated in the clause of output1 and output4, institutional coherence was formed and strengthened; PBO and FRWO for the budget aspect and MENARID, JAO, CHHTO, etc. for the operational organization aspect, so that the indicator was achieved.

2.1.5.3 Summary of the achieved level

All the indicators were achieved.

Based on the intention of the project implementation, the following changes in capacity on participatory forest and rangeland management of NRWGO took place:

- ✓ Human capacity on participation: Human capacity of NRWGO staff, C/P as well and field staff was further developed.
- ✓ Implementation system on participation: the system was strengthened, through field operation of JICA project, MENATID, PPP, etc. and PCC could work on internal coordination among these projects.
- ✓ Participatory field activities: On utilization of national land and increased flexibility. Access to fields was improved. Confidence between villagers and NRWGO and villagers' autonomy was increased.
- ✓ Fund for participatory operation: Budget codes for participatory activities were approved between NRWGO and provincial PBO. There are microcredit groups which are on track and actively working.
- ✓ Utilization of technology for participatory operations: development of practical technology to restore vegetation with medicinal plants and wild fruit, etc. has progressed. Improvement of VAP, which is useful for starting participatory activities, has progressed. Participatory forest and rangeland management guidelines have been prepared.
- ✓ Time factors: Regeneration of protection area (by natural means and sowing) is clearly underway. Early harvest peaches are reaching the harvest stage as are medicinal plants. Dialog with NRWGOs and

villagers, including CF, is occurring spontaneously. On the microcredit activities, these have progressed from the fund-raising stage to the investment and rotation stage, whereupon villagers connected with training on sewing and beekeeping, etc., have been able to realize their own business.

Based on the above changes, the project achievements are clearer and more visible. Thus, the project purpose “The capacity of NRWGO for participatory forest and rangeland management is enhanced” can be said to have been achieved on the whole.

2.2. The Project Activities

2.2.1 Items concerning administration and management

2.2.2.1 Outline of administration and management

The first to fifth years of the project were implemented based on an M/M dated 20 October, 2009 and R/D dated 14 March, 2010 and the extended phase was implemented by December, 2016 based on an R/D dated 22 February, 2015. On the implementation between the first and fifth years, the proposed Inception Report, based on the R/D in 2010, was approved in the first year. The project has been conducted to achieve the project purpose and overall goal with slight amendment of activities, based on the plan, feedback from monitoring, recommendation of a mid-term review and final evaluation. During the extended phase in particular, activities to secure sustainability were strengthened to meet the requirements of the recommendation under the final evaluation survey.

The first year activity period was from June 2010 to March 2011. The project implementation system, the project office in NRWGO in Shahrekord and the project office in the Bazoft area were established. In addition, the building in NRWGO nursery was improved as a training facility.

The second year activity period was from June 2011 to December, 2011. The Bazoft office, which became the base of field activities in the area, could set up accommodation by the start of the second year.

The third year activity period was from February to December 2012. A mid-term review was carried out from September to October, 2012 and various recommendations were given by the mid-term review team. Under economic sanctions from Western countries, Iranian market prices rose and the national budget for C/P organizations declined.

The fourth year of activities was from February, 2014 to March 2014, while the presidential election was held in June 2013. As for the election results, the human affairs of the project executive had no significant influence. However, the Director General of FRWO changed, which prompted many personnel changes in JAO. Following the change of government, although recovery of the NRWGO budget was expected for the project, local cost expenditure was considered difficult for half a year. Following the recommendation of the mid-term review, collaboration with other organizations officially started.

The fifth year for activities was from April 2014 to June 2015. Because the fifth year is the final one of the project, the final evaluation took place from January to February in 2015. By the final evaluation, there were various recommendations on operation of the project from now. To establish a sustained implementation system after the project end had been examined in JCC and JOT, cooperation with the organization concerned was performed and the PDM was revised, including corrections and additions.

The period of extended year activities was from September 2015 to December 2016. Based on revised PDM, activities to secure sustainability and focusing on institutional coherence were implemented.

2.2.1.2 Holding of JCC

In the first year, local field activities started in July, 2010 based on the contents of the M/M dated 20 October, 2010 and the R/D dated 14 March, 2010. Documents and information were collected analyzing the target area and an Inception Report (ICR) was prepared. In the first JCC dated 9 August, 2010, the ICR was explained and approved. In addition, JCC decided on the villages in a baseline survey to select target villages. On 22 February, 2011, the second JCC of the first year was held. The results of the PRA survey and the condition of the forest and rangeland in the target villages were presented, while PDM indicators and the detailed PO were examined and approved. At the same time, a report on C/P training in Japan was presented by participating C/P and the training contents were shared.

In the second year, the third JCC was held on 2 November, 2011. A brief report of the project activities in the second year, a policy of activities for the third year and PDM indicators (draft) were presented and explained and the contents presented were approved after an exchange of opinions.

In the third year, the fourth JCC was held on 17 October, 2012. In JCC, mainly the result of the mid-term review was reported by the review team and questions and answers ensued. In particular, the mid-term review team recommended in JCC, "Making guidelines on participatory forest and rangeland management", "Reinforcement of activities in highland rangeland", "Cooperation with other organizations" and "Feedback of on-site activities to training" in the activity level of PDM, the outlines of which were approved. Based on these recommendations, future activities were examined with JOT member and feedback obtained.

In the fourth year, the fifth JCC was held on 25 November, 2013. In JCC, major topics included the project reported activities of the fourth year, plus new Iranian C/Ps and slight corrections to the PDM indicator. Each topic was explained and approved. With the future in mind, the project raised the needs to provide a budget for the Iranian side.

In the fifth year, the sixth JCC was held in Tehran on 19 May, 2014. In the JCC, the policy of activities for the fifth year and the post-project implementation system were presented and discussed. On 4 February, 2015, the seventh JCC was held in Tehran. Five years of project activities were reported on, a final evaluation report covering all activities was submitted and the evaluation results were reported and recommendations explained by the joint evaluation team. The JCC focused on the final evaluation, as well as some supplementary explanation and questions and answers among members. The JCC approved the reported contents, including a recommendation that the project period be extended as necessary to establish a model to disseminate participatory forest and rangeland management in the province after the project had ended.

In response to the final evaluation recommendation on the extension period, between FRWO and JICA, the Iranian Office agreed and concluded an M/M at 11 March, 2015 about the R/D extension period signed on 14 March, 2010. On April 30, 2015, an additional JCC was held. PDM, including the contents of the extended period, were agreed and minutes were signed.

During the extended phase, JCC was held on a total of four occasions.

The first JCC was held in Shahrekord on 17 October, 2015 and the Work Plan and Monitoring Sheet were approved. During the Q&A session, institutional coherence with other organizations and details of the extension model, etc., were discussed.

The second JCC was held on 6 February, 2016 in Teheran. The progress of activities and PDM indicators were approved and the revised CD strategy report confirmed. The importance of PCC to coordinate the participatory projects and cooperation with MENARID was also confirmed.

The third JCC was held on 24 August, 2016 in Shahrekord. Activities progress, Monitoring Sheet ver. 2 and a proposal to strengthen cooperation with other organizations for institutional coherence were approved.

The fourth and final JCC was held on 5 December, 2016 in Shahrekord, at which the progress of activities and the project results achieved were approved. Revised participatory forest and rangeland guidelines and follow-up activities on VAP were also confirmed and a new project plan targeted at the Karoon River watershed was presented.

Table 2-1 Date and main topics of JCC

	No.	Date	Venue	Contents
First year	First JCC	9 August, 2010 17 Mordad 1389	Shahrekord	Discussion on ICR, confirmation of project members, confirmation on baseline survey in target villages
	Second JCC	22 February, 2011 3 Esfand 1389	Shahrekord	Report of the first year activities: outlines of five target villages and approval of second year activities, PDM indicators and PO draft, report on C/P training in Japan
Second year	Third JCC	2 November, 2011 11 Aban 1390	Shahrekord	Report of the progress of second year activities, logistics matters, PDM indicators and PO, approval of third year activities
Third year	Fourth JCC	17 October, 2012 26 Mehr 1391	Shahrekord	Report of third year progress, explanation of mid-term review report and discussion
Fourth year	Fifth JCC	25 November, 2014 4 Azar 1392	Shahrekord	Report of the progress of fourth year activities. logistics matters, approval of fifth year activities and PDM indicator
Fifth year	Sixth JCC	19 May, 2014 29 Ordibehesht 1393	Tehran	Approval of fifth year activities in detail, discussion on post-project
	Seventh JCC	4 February, 2015 15 Bahman 1393	Tehran	Approval of progress of fifth year activities, report on final evaluation results and recommendations
	Eighth JCC	30 April 2015 10 Ordibehesht 1394	Shahrekord	Approval of revised PDM, including extended period and others
Extended phase	First JCC	17 October, 2015 25 Mehr 1394	Shahrekord	Approval of Work Plan of the extended phase and Monitoring Sheet ver. 0
	Second JCC	6 February, 2016 17 Bahman 1394	Tehran	Approval of progress of extended phase, confirmation of CD strategy, importance of PCC, PDM indicators, cooperation with MENARID
	Third JCC	24 August, 2016 4 Mordad 1395	Shahrekord	Approval of progress of the extended phase and Monitoring Sheet ver. 2, proposal of strengthening system for relationships with other organizations for institutional coherence
	Fourth JCC	5 December, 2016 14 Azar 1395	Shahrekord	Approval of implemented activities and achievements, confirmation of revised guidelines, follow-up VAP activities, new project in Karoon basin

2.2.1.3 Public relations activities

Keeping in mind that the project implementing method on participatory forest and rangeland management shall be disseminated to other areas, the project has striven to disclose information and engage in public relations activities.

In particular, when the overall goal of PDM is considered, it is important for NRWGO to draft plans

for forest and rangeland regeneration and income generation activities and it shall conduct drafted plans in villages other than target villages, cooperating with villagers. the project shall strive to ensure their base for these activities that NRWGO can perform these activities independently. For this purpose, the project has collected excellent work examples from relevant areas, which were used as feedback to the project activities concerned. At the same time, the project also introduced project activities for those in the visit site.

During the extended phase, the project prepared a project brochure and distributed it at various events for visitors and venues. Midway through the extended phase, following a strong request from NRWGO, the project consulted with the JICA office and had striven to conclude a binding contract to make a video for introducing the Project. However, negotiations broke up and could not be agreed. The need for visual media was mentioned in the final JCC and these are expected to emerge.

(1) Newsletter and website

From the second year, the project has made newsletters (Japanese, Persian) introducing the project activities and distributed to relevant organizations and visitors at venues and events to showcase the project activities. The project has already published a project newsletter for No. 1 (project summary and introduction), No. 2 (progress of each activity), No. 3 (special issue on community development activities), No. 4 (special issue on highland rangeland activities), No. 5 (special issue on forest and rangeland activities) and No. 6 (special issue on Capacity Development/training activities). More than 2,000 copies of Nos. 1 ~6 in Persian were distributed. In the fourth year, the project homepage (Japanese) was also included on the JICA website. During the extended phase, the project published the following newsletters: No. 7 (introduction of extended phase activities), No. 8 (field activities in villages), No. 9 (Capacity Development and extension of achieved results) and No. 10 (project achievement).

(2) Workshops and seminars

The project held workshops and seminars, etc., inviting participants from other provinces and other projects to collect information and exchange views. These newsletters were then printed and distributed on each occasion.

In the fifth year, the project held a “participatory projects international seminar”, aiming to disseminate the results achieved by the project, collect information and exchange views with projects of other donors. Seven projects from UNDP, the World Bank, JICA, NRWGO and DOE presented activities, achieved results and the issues to be discussed and exchanged opinions during a panel discussion session. Moreover a participatory forest and rangeland guideline workshop was held and information collected to disseminate results achieved by the project and utilize them in future. Workshop participants included project members, technical deputies of NRWGOs from the Zagros area, NRWGO staff on a county level in the province and the joint final evaluation team, etc.

Following a strong request from the Iranian side, folders including a JICA seminar title and logo were prepared and distributed. Even so, the Iranian side stated that compared to UNDP projects, the Project lacked public relations materials such as pamphlets for distribution and films for introduction. During the extended phase, the project prepared more brochures for distribution and bags with logo marks, which could be distributed on other occasions.

During the extended phase, in November 2016, a project achievement dissemination seminar, open to the public, was held in Shahrekord. A total of 200 people participated, project presentations were made and the

results achieved by projects were disseminated. A workshop to introduce, utilize and disseminate revised participatory forest and rangeland guidelines was also held. Heads of NRW in the province, NRWGOs in the Karoon watershed and NRWGOs in the Zagros area attended.

(3) External public media relations

During the fourth and fifth years, the project was interviewed by national media company such as IRNA and Tasnim, at the seminar, workshop and JCC, with articles published on the web page and newspaper. In addition, the Chaharmahal-va-Bakhtiari Province TV station (Jahanbin) broadcast a seminar and workshop on a news program. During the extension phase, the PR office of NRWGO arranged news media companies and local TV for public relations reports. In the natural resources TV program prepared by NRWGO, the project had the opportunity to explain about natural resources by Chief Advisor.

(4) Site visit within and outside the province and acceptance of a site visit from within and outside the province

Using site visits as an excellent example within and outside the province each year, feedback on project activities was introduced to the venues visited and opinions exchanged. From the third year, the project accepted many visitors from the World Bank project of Mazandaran province, environmental committee of the provincial government, Shahrekord University, NRWGO of Yazd province, etc.

The project also presented and introduced activities in the NRWGO extension officer national meeting, NRWGO technical deputy national meeting, exhibition of participatory projects, the first national conference of oak forests and so on.

During the extended phase, the project prioritized cooperation with the NRWGO PR office. The project visited many NRWGO-related events such as the national conference on watershed management, memorial ceremony on the registration of the UNESCO Eco-Park in Gandoman wetland in Bruejen district in the province, a convention on sustainable natural resource management and development in Zagros area, other than the above and displayed banners of the Project, samples of medicinal plant seeds, some production from the Bazoft area etc. as well as distributing project brochures and newsletters. The project accepted many visitors, including from Yazd university, etc.

(5) Collaboration with other organizations

Cooperation with other organizations is just as important as public relation activities. In particular, community development activities such as orchards and sewing involved collaboration with JAO and TVTO for the pilot project. During the third year, the project officially requested cooperation from JAO to continue activities in future, but continuing the activities under the JAO budget was difficult because they also had their own organizational priority. The Project has got convenience in field from World Bank project, UNDP project and provincial NRWGO, when the Project went out of the province for site visit on excellent examples and similar projects.

Due to Output 4 added during the extended phase, examination, discussion activities concerning collaboration/coherence with other organizations were actively implemented and links with ICHTO were reinforced. It is noteworthy that the NRWGO Planning and logistic department contacted BPO to get the budget code on participatory forest and rangeland for sustainability, while the budget section held meetings with the BPO frequently and approved two budget codes. Suggestions for collaboration/coherence are described in the Output 4 paragraph.

2.2.1.4 Training in Japan

Counterpart training in Japan for the Project was implemented every year from the first to the fifth year. During the extended phase, there were plans to hold it twice, once for practical experts and once for policy decision-makers in future, but the second training session for decision-makers was canceled by the Iranian side. The participants, schedule and contents were as follows:

Table 2-2 Schedule and participants of training in Japan

Year	No.	Name of Participants	Position in the Organization (Position in the Project)	Duration of Training	Contents with place
1	1.	Mr. Mohammadreza Shojaei	Deputy for Watershed Management, FRWO (Project Director)	January 9~29, 2011 (19days)	Forest and Rangeland Management Course Tokyo: forestry in Japan, erosion control planning, Japanese oak decline, case study on participatory approach, etc. Unzen: erosion control Aso: rangeland management Ooita: rural development Shiga: erosion control Kagawa: administration of local government (prefecture level), broad-leaved forest management, participatory approach Tama: training system
	2.	Mr. Alimohammad Mohammadikhara ji	Deputy for Technical Affairs, NRWGO (Deputy Project Manager)		
	3.	Mr. Hosseinali Mohammadi	International Project's Section, Watershed Management Deputy, FRWO (Project Coordinator)		
	4.	Mr. Shahin Derakhshan	Forestry Expert, Technical Affairs, NRWGO (Counterpart of Training)		
2	5.	Mr. Mohamad Imani	Head of programming and Coordination Group, FRWO (---)	January 26 ~February 9, 2012 (16days)	Forest and Rangeland Management Course Tokyo: forestry in Japan, erosion control planning, Japanese cases of communal forest, protection forest, case in China, REDD+, etc. Shiga: erosion control Kyoto: Japanese oak decline Okayama: forestry administration of local government (prefecture level), Broad-leaved forest management, NTFPs, rural development, slope planting
	6.	Dr. Ataollah Ebrahimi	General Director, NRWGO (Project Manager)		
	7.	Ms. Bahareh Tofjghi	Head of Study Office, NRWGO (Counterpart of Forest & Rangeland)		
	8.	Mr. Fakroddin Karimizadeh	Secretary of General Director, NRWGO (Counterpart of Forest & Rangeland)		
3	9.	Mr. Parviz Garshasbi	Deputy Head for Arid and Semi-Arid Region and Deputy Head for Watershed Management, FRWO (Project Director)	July 17~26, 2012 (9days)	Community Development and Organization Capacity Development Course Tokyo: forestry in Japan, forest owners' cooperative, rangeland management, rural development policy, study & research, extension organization, One Village One Product movement, etc. Hanno: eco-tourism, Satoyama Nagano: national forest management, erosion control, profit-sharing reforestation system, forestry administration of local government (prefecture level), rural development, research on NTFPs, forestry extension, market & distribution for wood, charcoal utilization, etc.
	10.	Mr. Ali Javaheri	Deputy for Technical Affairs, NRWGO in Fars Province (---)	July 17~31, 2012 (15days)	
	11.	Mr. Jamal Mousavi	Watershed Management Deputy, NRWGO in Zanjan Province (---)		
	12.	Mr. Shahram Jazayeri	Head of Forestry Office, NRWGO in Chaharmahal-va- Bakhtiari Province (Counterpart of Community Development)		

	13	Mr. Hossein Bahrami	Watershed Management Deputy, NRWGO in Chaharmahal-va-Bakhtiari Province (---)		
	14	Mr. Behzad Mokhtari	Koohrang Office (NRWO), NRWGO in Chaharmahal-va -Bakhtiari Province (Field Counterpart)		
4	15	Mr. Mohammad Aghighi	Head of Planning and Coordination office in Watershed Deputy, FRWO (Project Deputy Director)	January 20 ~February 4, 2014 (16days)	Organization Capacity Development Course
	16	Mr. Khosro Abdollahi	Director General, NRWGO (Project Manager)		Tokyo: forestry in Japan, organization system of Forestry Agency, training system, forestry subsidy system, workshop on organization Capacity Development, etc.
	17	Mr. Soleiman Bahmani	Head of extension office, NRWGO (Expert on Capacity Development & Training)		Miyazaki: national forest management, protection forest, technology & research on forestry, forestry administration of local government (Prefecture level), land rights, etc.
	18	Mr. Mansour Najafi	Head of Bazoft office, NRWGO (Field Expert)		Aya-cho: rural development and forestry project
5	19	Mr. Houshang Jazi	Senior expert, FRWO (---)	July 27 ~August 12, 2014 (16days)	Organization Capacity Development Course
	20	Mr. Gholamhossein Nasiri	Secretary of Technical Committee, NRWGO (Expert on Participatory Forest & Rangeland)		Tokyo: forestry in Japan, organization system of Forestry Agency, system on extension and training, budget for forestry agency, workshop on organization Capacity Development, etc.
	21	Mr. Rahman Tavakoli	Head of Engineering Office, NRWGO (Expert on Capacity Development & Training)		Yokosuka: forestry extension project, forestation project in collaboration with government and private sectors
	22	Mr. Alireza Mardanian	Expert of Watershed, NRWGO (Expert on Community Development)		Tanzawa: forest conservation project in participation of citizens, study and research on forestry Miyazaki: national forest management, erosion control, forestry administration of local government (prefecture level), group on forestry research, etc.
Extended Phase	23	Mr. Hamid Hosseinpoor	Head of group of natural resources and watershed planning and budget of MPO national level (---)	April 4 ~ April 19, 2016 (16days)	Training for Strengthening on Participatory Forest and Rangeland Management
	24	Mr. Mohamad Sherafati	Deputy of Watershed management & soil conservation bureau (---)		Tokyo: forest and forestry in Japan, extension and guidance system, budget of forestry agency concerned, etc.
	25	Mr. Ali MohammadiMoghadam	Director General of Natural Resources and watershed General Office (Project Manager)		Chichibu city (Saitama): extension activities of provincial government, collaboration works between government and private sector, timber trade, wood chip processing, <i>Acer</i> spp. sap harvest, <i>Zanthoxylum</i> spp. (Japanese pepper tree) and rural development, NGO's activities
	26	Mr. Esmail Salehi	Deputy of Planning and supports of Natural Resources and watershed General Office (---)		Nagano city, Iiyama city, Nakano city, Sakae village (Nagano): national forest management, boundary demarcation, customary forestry, prefectural forestry administration, extension system, small piece of forest gathering and integrated forest land management, interview to advanced forest owner, wild vegetable cultivation, village administration
	27	Mr. Hamid Mahinpoor	Secretary of Technical Committee (Expert on Participatory Forest & Rangeland)		
	28	Mr. Mohamadreza Mohammadi	Head of Rangeland office of Natural Resources and watershed General Office (Expert on Participatory Forest & Rangeland)		

2.2.1.5 Preparation of monitoring sheets and annual reports

Based on a contract between JICA and consultant companies, the consultant has an obligation to submit reports in the following table 1-7 to JICA each year as part of the technical cooperation results achieved. In addition, the consultants submit a monthly report (with all required documents properly attached) to the supervisor and sub-supervisor of JICA, which is orally reported as needed. The project team also cooperated by indicating the progress, evaluation work and obtaining on-site guidance and advice from JICA staff, the mid-term review team and final evaluation team. During the extended phase, in addition to the above report, the project submitted a Work Plan (13 sets of English version) and the Monitoring Sheet every six months (three sets of the Japanese version, 13 sets of the English version).

Table 2.1.4-1 list of reports

	Title	Number	Date
1	Inception report	English 15, Japanese 5	August, 2010
2	Annual report first year	English 15, Japanese 5	March, 2011
3	Annual report second year	English 13, Japanese 3	December, 2011
4	Annual report third year	English 13, Japanese 3	December, 2012
5	Annual report fourth year	English 13, Japanese 3	January, 2014
6	Annual report fifth year	English 13, Japanese 3	June, 2015
7	The project completion report	English 13, Japanese 3	February, 2017

2.2.1.6 Mid-term review and result

A mid-term review was conducted from 28 September, 2012 to 19 October, 2012. The joint review team members comprised four members from the Japanese side (JICA Head office [2], Forestry Agency [1] and evaluation consultant [1]) and from the Iranian side (NRWGO of Fars province [1], ChaharMahar-va-Bahtiyari province [1]), The project cooperated with the team in terms of: preparation of a detailed schedule for the field survey and preparing a self-evaluation table, coordination and arrangement for the people and organizations concerned, a field investigation in Bazoft and arrangement of meetings and interviews, etc. The review team reported to JCC on the evaluated result and recommendations, including the following 11 items, which was agreed by both sides:

1) Development of guidelines for participatory forest and rangeland management

The project aims to accumulate good practices, verifying technologies for forest and rangeland regeneration/management in the target villages and technologies developed by Iranian experts, which are expected to be expanded elsewhere. Accordingly, to enable prompt expansion, it is recommended that guidelines be developed, including techniques and experiences obtained by the Project.

It is expected that practical methods to regenerate forest and rangeland and use them sustainably, preliminary feasibility of the techniques, consideration from a long-term perspective and experiences of participatory approaches be included in the guidelines.

2) Implementation of similar activities by Iranian experts

Once the project ends, to expand it to other areas smoothly by Iranian experts, during the remaining period of the Project, it is desirable for Iranian experts to implement similar project activities by themselves

as a trial.

3) Further progress in participatory activities

People's participation in the project was limited, due to the cultural background of the local community etc. Under these circumstances, people's participation is promoted in CF selection, expression of opinions, consensus-building, VAP-making and establishment of protected areas during the latter half of the Project term.

4) Strengthening forest and rangeland regeneration activities

Since forest and rangeland regeneration is the main objective of the Project that; a) various kind of technology development and verification experimentation, including coppice regeneration, b) it is appropriate to select one rangeland site and implement regeneration demonstration.

5) Community development activities

Some activities of alternative income source development and introduction are controlled by other government organizations rather than NRWGO and face problems such as uncertain feasibility of alternative income source. Under these circumstances, the Project must focus on activities which can directly get benefits from forest and rangeland, such as cultivating wild vegetables etc. and support funding to market production on a trial basis.

6) Giving feedback on field activities for training courses

During the project design stage, the intention was to enhance the synergy effect by giving feedback on field experience to training courses operated under output4 in PDMver. 4. However, since present training courses could not always provide practical field examples for learning sufficiently, during the latter half, feedback on training course field activities will be strengthened.

7) Collaboration with other relevant organizations

At the project design stage, when the project activities proceeded, collaboration between other organizations was supposed to be considered in the target villages. Considering the current situation, appropriate collaboration with other organizations such as JAO, ICHHTO, the Forest and Rangeland Research Institute, Nomad Affairs and the Ministry of Road and Transportation etc. are needed.

8) Modification of PDM

PDM must add activities concerning the preparation of guidelines and indicators and a clear purpose must be defined.

9) Improvement of the implementation process

To improve the implementation process, the following are required: (a) Periodic meetings to encourage information-sharing among experts, (b) Assignment of an Iranian local coordinator in NRWGO to implement the project activities smoothly, (c) Based on the PDM indicator, monitoring, recording and giving feedback on each activity.

10) Dissemination of project achievement to other areas

The achieved project outcome will be applicable in Iran, particularly the Zagros area. The project is also recommended to disseminate project activities for other institutions elsewhere in a more positive manner.

11) Preparation of post-project strategy

To continue activities smoothly after the project, other than technical guideline, the project shall prepare a post-project strategy. In particular: (a) Continuing training for officers working in the field activity, (b) implementation structure of post-project activities, (c) Logistic issues such as transportation shall be considered and a strategy prepared.

The mid-term review report was presented in JCC and approved. JOT members also met to confirm the key issue of the evaluation report and discuss the revised PDM, while a wrap-up and confirmation were conducted.

2.2.1.7 Final evaluation and result

The final evaluation was conducted from 15 January to 4 February, 2015. The joint evaluation team comprised three members from the Japanese side (JICA Head office [2], evaluation consultant [1]) and 3 members from the Iranian side (FRWO [1], NRWGO of Fars province [1], NRWGO of Chahalmahal-va-Bahtiyari province [1]) and an Iran/Japan Joint Evaluation study was conducted. As with the mid-term review, the Project cooperated with the team by preparing a detailed schedule for field survey and a self-evaluation table, coordinating and arranging the people and organizations concerned, field investigation in Bazoft, arranging meetings and interviews, etc. The review team reported to JCC on the evaluated result and recommendations, including the following 11 items and which was agreed by both side. The survey team evaluated on the project achieved result as follows;

PDM indicators have mostly been achieved. It was confirmed that due to the participatory approach introduced and resulting mutual reliance among villagers, villagers understand the importance of natural resources. They have also initiated vegetation recovery activities by themselves and observed certain impacts. Given the fact that much of the land in Bazoft was utilized by nomads, the Project spent a long time on processes from selecting an appropriate site for activity to consensus formation and implementing activities implementation. Despite many difficulties, the results achieved are now emerging.

Despite these achievements, conversely, it seems the organizational structure and human resources of NRWGO remain insufficient for participatory forest and rangeland management and villages still have difficulties in continuing the model plot and introducing alternative income sources without support.

Currently, C/P organizations are preparing to disseminate the participatory approaches for forest and rangeland management to other provinces in the Karoon watershed, for this purpose, the need to revise the guideline, develop C/Ps capacities and establish an organizational framework became necessary.

Based on the above, to enhance the project impact and secure project sustainability, the evaluation team recommended that the project implementation period be extended.

The five evaluation criteria of the OECD-DAC, recommendation and lessons learned are summarized as follows:

(1) 5 evaluation criteria

1) Relevance: “High”

The need for a participatory approach in the area is high and Chaharmahal- va-Bahtiari province was

selected as a model case for natural disaster reduction. Soil conservation in the Karoon watershed was appropriate and the Bazoft area were also selected. The project is in line with Iranian policy and consistent with Japan's assistance policy for Iran. The overall project design was also considered appropriate in terms of the focus on a participatory approach and inclusion of livelihood activities alongside forest and rangeland management

2) Effectiveness: "Relatively High"

The project purpose is achieved to a certain extent, but not sufficiently for NRWGO to promote participatory forest and rangeland management by themselves. Capacity Development of key counterparts was upgraded and general awareness and knowledge of technical officers of NRWGO was boosted. This means that despite the fact C/P Capacity was boosted and the fundamentals of the general staff, no participatory approach is placed in the mainstream in NRWGO and it seems longer may be needed to boost income in the target villages, which aims to decrease dependence for forest and rangeland.

3) Effectiveness: "Moderate"

Input from both the Japanese/Iranian side is generally done appropriately. Some of the input under the project, such as employment and payment for guardsman, generated output, but unsustainably. It took time to build trust and input deemed necessary. Technical cooperation from other organizations was supplied but without any organizational commitment.

4) Impact: "High"

The overall goal has mostly been attained and if relations between the experience of JICA and MENARID activities were confirmed, the project impact would be greater. Positive impacts are observed such as: improved environment through forest and rangeland regeneration promotion activities, empowerment of villagers, particularly women, establishment of fruit gardens among villagers not in Community Development Groups and NRWGOs that started establishing fig plantations, etc.

5) Sustainability: "Low"

Key to project sustainability is ensuring a financial flow to the community, so that they protect forest based on their own funding and benefit in the process. The payment for forest guards, however, may fuel tension between NRWGO and the community and imperil their current trust relationship. Human resources of both villagers and the NRWGO staff concerned and their Capacity Development are required. In addition, another socio-economic constraint is the current banking system, etc., using acquired knowledge for real business activities. Some residents who were not members of current project activities group are still willing to join in the project. Their willingness to participate shall be taken into account to sustain a future relationship of trust between NRWGO to sustain project activities.

(2) Recommendations

To enable participatory forest and rangeland management, villagers shall benefit from forest products and which could be realized by issuing permission to use national land. To establish a participatory forest and rangeland management model, the evaluation team identified five challenges/solutions to be implemented by NRWGO as follows:

- ① Assist organizing cooperatives and support activities, support villagers to produce seeds and

seedlings

- ② Support implementation capacity building of CF
- ③ Support activities with the collaboration of related organizations on alternative income source development and microcredit and bank loan introduction
- ④ Enhance the NRWGO system to improve cooperation with villagers and control illegal activities
- ⑤ Promote product marketing in cooperation with the concerned organizations

Based on the above challenges/solution, specific actions to be taken before and after the project ends were as follows:

Recommendations for actions before the Project ends

- ① The Project should aim to promote project sites, where the Bazoft Model (forest and rangeland regeneration (protected area) activities and participatory forest and rangeland management (livelihood improvement activities) are being implemented, to close to an ideal model above.
- ② The Project should establish a system to implement participatory forest and rangeland management, by carrying out training by experience and capacity strengthened/trained C/Ps for other NRWGO staff.
- ③ Through site visits and discussions, the Project should review experiences and lessons learned and revise “the guideline for participatory forest and rangeland management” to practice and promote participatory forest and rangeland management under the arrangements of Zaguros area’s NRWGO.
- ④ The Project should improve and establish a participatory system within NRWGO to monitor the recovery of vegetation, evaluate the progress of forest and rangeland regeneration.
- ⑤ The Project accepts training and site visits from Zaguros area NRWGOs to promote and disseminate the Bazoft Model by implementing packaged training, including lectures on guidelines and site visits.
- ⑥ The Project supports MENARID to utilize the experiences and outputs of JICA projects in cooperation with MENARID to practice participatory forest and rangeland management around the Karoon watershed; not only Chaharmahal-va-Bakhtiari Province. For that, NRWGO should strengthen facilities and secure an implementation budget to practice the participatory forest and rangeland management widely in Chaharmahal-va-Bakhtiari Province.
- ⑦ The Project should review the CD strategy of Output 1 to implement the recommendations, because the current CD strategy lacks a perspective to disseminate participatory forest and rangeland management.
- ⑧ The Project should clear the way after the project for a way of supporting the activities of alternative income sources at project sites in cooperation with relevant organizations.

Recommendations for post-project actions

- ① NRWGO should practice the Bazoft Model established through this Project in more villages in Chaharmahal-va-Bakhtiari Province.
- ② NRWGO should strengthen cooperation with provincial government and/or relevant organizations and make the model and process applicable for wider dissemination, as well prepare a strategy for dissemination and a strategy to develop organizational capacity. The objective of these actions is for, NRWGO to promote a) the recovery of the watershed function to conserve water, b) disaster risk reduction, c) and rural development (including the introduction of an alternative energy source).
- ③ FRWO should design a participatory forest and rangeland management system in the Zagros area,

using the outputs and lessons learned from this Project.

④ FRWO should consider improving its system to promote the sustainable use of forests as an incentive for local people. One way of doing this is by establishing a demonstration site within national land to test the sustainability of forest when timber and non-timber products are harvested.

(3) Lessons learned

The following lessons were learned from this Project implementation, as reference for other or future JICA projects:

1) The PDM should be better defined at the planning stage.

If any part of the activities in the PDM is unclear, the stakeholders should promote a common understanding and add/revise activities as necessary.

2) The indicators should be revised or added as needed at JCC.

Because some of the indicators set during the planning stage do not sufficiently capture the Project's performance toward attaining the Project Purpose and Outputs.

3) In implementing participatory projects, there is a need to take sufficient time to change the mindset of CP organizations and promote understanding of the communities.

4) Sustainable activities should be selected, by examining the government's community assistance system, the capacity of the CP organizations and the method and approaches adopted elsewhere.

On the one hand, the Project funded the guards and those who planted trees in the Model Plots, but conversely, it failed to ensure the necessary post-training activities for, e.g. apiculture. Although these measures were necessary to demonstrate the forest and rangeland regeneration and boost the communities through livelihood activities within a limited period, there was room for improvement in selecting activities and in light of ensuring sustainability after the Project.

5) Collaboration at a higher level of government should be incorporated in the project planning, to realize sufficient cooperation for field activities.

The activities of this Project included technical support for more productive apiculture and fruit growing and for marketing these products, for which cooperation from provincial government and JAO was crucial. The need for such cooperation shall be predicted at the start of the project.

2.2.1.8 Self evaluation of the project implementation result at the end of the extended phase

This section contains a self-evaluation of the implementation results of the extended phase on five evaluation items in OECD-DAC based on "2.2.1.7 Final evaluation and its result".

(1) Relevance: "High"

The "relevance" level parameter was evaluated as "high" in the final evaluation from the aspects of needs on participatory forest and rangeland management, both from NRWGO and villagers, relevance on area selection from the survey report "The study on watershed management plan for Karoon River",

consistency with Iranian law and policy on forest and rangeland management and consistency with Japan's assistance policy for Iran.

During the extended phase, the relevance was evaluated as "High", because of the following reasons; newly added as mentioned above;

- 1) The reasons are that during the extended phase, cultivation of economical tree species in national land became possible, although formerly prohibited by FRWO and NRWGO adopted a major policy promoting cultivation of medicinal plants on national forest land and rangeland. Accordingly, the participatory approach on forest and rangeland management became indispensable and the need for the project increased.
- 2) In IWM which is the major policy promoting in FRWO, a participatory approach was introduced and forest and rangeland management is a major activity.

(2) Effectiveness: "Relatively High"

During the final evaluation, the project purpose was deemed as achieved some extent and despite being insufficient to promote participatory forest and rangeland management by NRWGO independently, its effectiveness was evaluated as "Relatively High". During the extended phase, by achieving the outputs revised for the extended phase, the project purpose "NRWGO's participatory forest and rangeland management capacity was enhanced" seemed mostly achieved. The reasons are described as follows:

- 1) Generally the project purpose was "achieved" and the effectiveness was evaluated as "High", but the new indicator "Implementation system for participatory forest and rangeland management collaborated with concerned organizations is formulated by NRWGO", was not developed solely by the project achievement, but MENARID also greatly contributed. Even so, the project established and operated a "Participatory Project Coordination Committee (PCC)" which was not scheduled in the original plan. It functions among three projects in Chahalmahal-va-Bahtiari province, the JICA project, MENARID and PPP, to exchange opinions and recommendations, develop human resource capacity on participatory methods and solve problems connected to the participatory operation and coordination of participatory method among the projects. These experiences have helped achieve the project purpose.

2) Improvement of points evaluated as a constraint to promoting participatory forest and rangeland management by the final evaluation

- ① Final evaluation pointed out that through OJT, with more NRWGO staff from the appropriate section/division engaging in OJT in each fields, the participatory approach would become mainstream in NRWGO and the staff would have the chance and skills to use knowledge to promote participatory forest and rangeland management. During the extended phase, staff it is no doubtful that increasing staff who developed the capacity on participatory forest and rangeland management, through staff who acquired facilitation ability on participatory development through the project activities have trained other staff through OJT on implementation of PPP and other works and hold training courses concerning participatory development. However, it is not sufficient in actual condition, necessity of increasing staff is remained.
- ② An unclear description of PDM was pointed out and revised before the extended phase started. In PDM, at the final evaluation, outputs 1~4 were compiled by the activity base as; 1) Establishment of the Capacity Development Strategy, 2) Promotion of forest and rangeland recovery, 3) Introduction of community development, 4) Implementation of training, In PDM for the extended phase, outputs

1-3 were restructured to clarify PDM more effectively, by compiling the implementation structure and promoting activities for the participatory forest and rangeland management, such as: 1) Preparation of participatory forest and rangeland management system of NRWGO, 2) Strengthening the implementation system for sustainable participatory forest and rangeland management in the target villages 3) Promotion of participatory forest and rangeland management activities in the target villages.

- ③ It was also pointed out that though the effect of activities in the pilot villages was beginning to be observed, there was still a need for sufficient income to eliminate reliance on forest resources, thus the activities may not contribute directly to the major deforestation and degradation factors, such as activities to reduce firewood consumption. During the extended phase, though activity such as introducing a new alternative energy source was not implemented, proper activities for conservation of protected area, conservation of regenerated seedlings and understory vegetation were prevent from degradation of forests by livestock. These are direct treatments against the causes of deforestation and forest degradation. PPP is promoting the introduction of solar heater facilities which, if progressed, are expected to help decrease deforestation and degradation as for NRWFO of Chaharmahal-va-Bakhtiari Province.

(3) Effectiveness: “Moderate “

In the final evaluation, the effectiveness level was “Moderate“, because the inputs of the project were mostly properly conducted, but many of the arrangement costs were incurred in the former half stage.

Since the arrangement costs in the former half of the Project were already spent, there is no way to recoup the costs during the extended phase. Conversely, given some points of improvement below, the effectiveness level can be evaluated as improved over Moderate.

- 1) Concerning vehicles, one of the cars donated for “The study on watershed management plan for Karoon River” was allocated to NRWGO in Chaharmahal-va-Bakhtiari Province, hence smooth management of the Project activities was partly secured.
- 2) In the final evaluation over five years of the Project, promotion of collaboration with other organizations was reconfirmed and the policy concerned for the Project would be studied and proposed in an extended phase. For this purpose, a new expert on strengthening and organizational coherence was input. A policy on collaborating with other organizations was also proposed, hence the input was evaluated as appropriate.

(4) Impact: “High“

At the time of final evaluation, the perspective to achieve the overall goal was becoming clear and improvement of environment, development of empowerment in community and positive impacts on livelihood activities of non-participated the project Moreover positive impact on other NRWGO operation and other donor program, the impact was evaluated High.

Because the extended phase was implemented, the prospect of achieving the overall goal increased. Moreover, the positive impacts mentioned were maintained and developed, which meant the impact was evaluated as continuously high. The reasons for each item are described below:

1) Scope on achievement of the overall goal

Regarding the overall goal, because PPP is implemented by the land affairs department and MENARID is expanded, one of the indicators of the overall goal, “Participatory forest and rangeland management activities are newly introduced at least five sites at a district level”, has already been achieved. Accordingly, it can be said that the overall goal was set lower than predicted, but because PPP had not started when the PDM for extended phase was drafted, there was no means to adjust it. In fact, NRWGO could achieve more than the project originally expected, since the participatory forest and rangeland activities were developed over more than five locations and are expected to expand further, meaning even greater achievements are expected. In addition, even if the perspective of the indicator of overall goal changes to “Participatory forest and rangeland activities will be continuously conducted in Chaharmahal-va-Bakhtiari Province”, the perspective can be fully achieved”.

Moreover, another indicator “Participatory forest and rangeland management activities in the target area are maintained, by using knowledge and experience gained from the project” is deemed “achieved”, because sustainability has been effectively increased as of the final evaluation, as will be mentioned in paragraph “(5) sustainability”.

2) Positive impact and ripple effect

The positive impact and ripple effect created over the five years of the project remain, as well as the following remarkable impacts through implementation of the extended phase:

- ① Empowerment of Communities: Activities of the community’s empowerment during the five years are maintained as well as additional achievements :
 - ✓ Marketing activities have been developed and sales achieved, business in other products has become active and product sales have also been achieved here. As described above, participant’s motivation for sales were increased, which meant positive rather than passive marketing was possible.
 - ✓ In Tabarack Sofla village, the village group intended to expand their protected area from 60ha of the area established under the project to 400ha under their own initiative, using the national land lease system of “Article 3 of the law of forest and rangeland utilization and conservation” and that they are going to be toward independent.
 - ✓ In Gazestern village, a microcredit system for a woman’s group was successfully implemented, empowerment confirmed and in an occasion of implementation of projects by ICHHTO the women’s group are actively committed.
- ② Impact for other NRWGO works and donor program: For PPP, staff who have been trained by JICA project have implemented facilitation for participatory workshop and others and an impact was appeared that new facilitators in NRWGO are trained in the workshop as OJT field. And other impact from training for human resources, such as that MENARID facilitator participated in JICA training program and workshops in target villages. Furthermore, the project helped improve and develop operation management on PPP and MENARID as a participatory operation project, by establishing and managing PCC. Because the JICA project selected the trainees who met training needs and conducted training, training conducted by NRWGO also selected trainees with real training needs such as villagers, etc. and NRWGO’s training is also becoming more effective.

- ③ Impact of training in Japan: Awareness of participation to the Project improved. The effects of this included, for example, acquiring budget codes on JICA project through the participation of the Director of Planning and logistic department in training in Japan, etc..

(5) Sustainability: “Low”

Although at the time of final evaluation, the sustainability of the project was evaluated as “low”, the following measures have been taken during the extended phase, whereupon sustainability has been increased and can be evaluated as “relatively high”.

1) Five target villages: The project formulated an exit strategy for the end of the Project when beginning the extended phase, which was examined to promote villagers’ independence. For example,

- ① The Project convinced villagers that NRWGO’s policy had changed to allow cultivation of commercial tree species also on national land, while before only medicinal plants and some fodder species could be cultivated. The benefit from planting cash crops could also be allocated to maintaining and managing the protected areas.
- ② Furthermore, in Tabarack sofla village, a land lease contract based on “Article 3 of forest and rangeland utilization and conservation” was proposed and a procedure to obtain permission from the Technical Committee in NRWGO is underway.
- ③ Some of the target villages maintained the protection area by their own income from medicinal plants cultivation without a national land lease.
- ④ As explained above, in such cases, some villages expressed their will to protect the protected area, despite no payment for forest guards from NRWGO
- ⑤ A sales method was developed for fruit cultivated and harvested and honey produced in villages
- ⑥ Villages emerged with properly managed microcredit activities, funds were accumulated and used for livelihood activities. Under these circumstances, during the extended phase, some measures taken to secure independence of village activities were confirmed and various activities appropriate for sites were conducted. Moreover, because a budget code was established, the NRWGO could independently allocate the budget for follow-up activities in the five target villages.

2) Participatory forest and rangeland management in other villages: The opinions of other provinces were requested and the participatory forest and rangeland guideline was revised. Moreover, the above mentioned budget code could be used for other villages. The capacity of NRWGO staff was also increased and NRWGO developed a new participatory project such as PPP independently. Also, NRWGO decided to promote IWM as a policy, whereupon the budget was confirmed. The participatory forest and rangeland management is a major portion of IWM framework and the participatory forest and rangeland management is expected to develop under the IWM project.

3) Improvement of points evaluated as “low” in the final evaluation

- ① It were pointed out that some target villages lacked any human resources with the ability to establish a cooperative and apply a proposal for governmental offices, which limited the scope of those capable of benefiting from the forest. Moreover, in NRWGO there is a limitation on staff capable of driving participatory forest and rangeland management in future other than those who worked mainly in target villages.

Given the village's limitation on human resources, cultivation of economical tree species in national land is permitted without leasing national land, reflected the reduced needs for training of human resources who make leasing proposals.

Moreover, regarding the limitation of NRWGO human resources, the number of staff who can facilitate a participatory workshop has been increased by conducting OJT in PPP and facilitator training, etc.

- ② Social limitations were pointed out, since the lack of a banking system in Bazoft area for bank loans limits access to credit and the opportunity to use their knowledge for real business. Despite ongoing major barriers to access bank loans, conversely the possibilities to secure independent fund have increased through microcredit activities introduced and developed in Gazestan village and promoting to other villages and marketing activities have also started to function.
- ③ Despite some villagers in the target villages failing to participate for various reasons, villagers now seem more willing to participate in the Project, to secure its sustainability and nurture the mutual trust between NRWGO and the villagers for the future. It was pointed out that the issue of villagers who did not participate in the Project activities should be examined.

2.2.2 Activities of the output1

2.2.2.1 Achieved results of the 1st year

(1) Basic data collection- grasping of natural and social conditions in the target areas-

At the beginning stage of the project from July till August 2010, similar projects which have attempted to recover vegetation were examined surveyed, concerned studies by Natural Resources Department of Shahrekord University and Forest and Rangeland Research Institute were interviewed. The university and the institute have less research information on Bazoft area.

Concerned text books of University, statistics and regional plan papers etc. have been collected. Most of papers of forest, rangeland, statistics, laws and regulations are written in Persian language. And that natural resources concerned laws and regulations which are indispensable to the project implementation, have gradually and slowly been translated.

(2) Case study on neighboring area

Basic policy on forest and rangeland management in Chahalmahal-va-Bakhtiari province have applied technically regeneration by natural seeding. Basic policy of rangeland is based on utilization permission system for grazing whose covering areas are national forest and rangeland, including forest understory vegetation whose condition for permission includes; permitted number of grazing head which is within natural regeneration ability and within assigned start date of grazing and within assigned grazing term. As for forest vegetation, timber harvest, excluding for house use, is prohibited to secure natural regeneration.

And also, in order to promote vegetation regeneration actively, there are also some areas in which specific areas are assigned as protection area, and some protection measures are applied.

In case of the similar NRWGO projects for the vegetation recovery, conservation area have been established getting consensus of villagers, NRWGO constructed fences and contracted area management to other party (NGO, Cooperative or Company). The contractor employed 2 to 4 villagers as guard to patrol the conservation area. Vegetation recovery has been observed and the effects of the activities are evident.

There was a conservation NGO which stated that the fund for guard has been decreasing.

Present situation of forest and rangeland in Iran, result of case study in neighboring area and policy of activities of NRWGO are summarized hereunder.

1) Actual condition of forest and rangeland management in Iran

① Forest and vegetation

The country area of Iran is about 4 times of Japan. The area with an annual precipitation of 500 mm or less occupies 90% of the whole country, and a forest area is equivalent to 7.5% of the country. Rangeland and desert occupy 74.3%. The forest and rangeland in Iran is roughly classified into four.

In addition, the definition of the forest in Iran is; the area is more than 0.5 ha, the tree height is more than 5 m and tree crown coverage is more than 5%, and it is set up lower comparing with the definition of Forest Resource Assessment, FAO.

Table2-4 Forest distribution in Iran

Area	Location	Characteristic
Caspian coast	Northern part of Iran, along the Caspian sea	Cool temperate deciduous broadleaf forest, annual precipitation 600-2000mm, commercial timber production area
Zagros mountains	The distance from northwest to southwest of this mountains is 1000km	Deciduous broadleaf forest consists of mainly oak tree species. Mean annual precipitation is 200-500mm. Alpine zones distributed above 2000m of elevation and protection and conservation area exists.
Other forest, semi-arid and arid area	Central to eastern part of Iran	Mean annual precipitation 50-450mm many of area are occupied by step semi- step and desert.
Persian gulf	Coastal area of southern part of Iran	Mean annual precipitation is 100-300mm, Tree species of Leguminosae, Mangrove

② Related law

The Article 50 of The Constitution, and an Islamic criminal code serve as a foundation of the environmental related legal system of Iran, and it has established the synthetic environmental law system.

The important laws are the "land law" established in 1962, and "the law about preservation and use of forest and rangeland" established in 1967. Many related ministerial ordinances are based on these laws. The former law specifies that all of the forests and rangeland other than the land accepted as a place of residence and private land belong to the government. The latter law specifies that environmental protection is the duty of the public for establishment of sustainable community.

FRWO which belongs to MOJA is performing management about the forest and rangeland, and watershed in the government land of Iran. FRWO is performing planning and implementation of the forest and rangeland management program and watershed management program in a provincial level by directing NRWGO as an implementation body.

③ Policy

Five years of 4th development plan (2005 - 2010) was enacted, and there is a statement of 14 items about environmental preservation in Chapter 5 in it (a fiscal year is till March 20). About the forest, a preservation of the forest resources, recovery, development, and use are stated to 68-70 articles. The five years of 4th development plan has also described the policy and strategy, and the enforcement method containing a participatory approach.

Provincial development plan of Chaharmahal-va-Bakhtiari province has been formulated same as national development plan. Project and budget management were implemented according to provincial development plan. In 2016 five years of 6th development plan was formulated and the application of participatory approach was yet emphasized in it.

④ Forest and rangeland management plan

As for forest and rangeland management plan, FRWO has a responsibility to prepare the budget and plan for forest and rangeland management. There are two ways that provincial NRWGO carries out the plan, and provincial government has a budget while NRWGO carries out the plan and implementation.

2) Result of case study in Chaharmahal-va-Bakhtiari province

① Chahtak protected area (Kiar District)

NRWGO set up the protected area of 215ha 14 years ago (1996), and installed the fence in the protected area. It is the successful example which the natural regeneration in a protected area followed and other vegetation besides a Persian oak (*Quercus persica*), Juniper (*Juniperas persolois*) Ash (*Fraxinus rotiforia*), and a Pistachio recovered by construction of model protected area. Carrying out management of a model protected area on the budget of 25,000 dollars -- among these, two guards were employed on the salary base with 7 million rial.

② Chig Sedimohammed protected area (Lordegan District)

NRWGO set up the protected area of 1,200ha in 2003, and installed the fence in 2006. Persian oak forest of this area is the tree height 5-10m, stand density intervals 10-20m and a sparse forest. Although the oak regeneration in a protected area was performed by not planting seedlings but seeding, seedling by natural regeneration was also seen in the protected area. The number of seedling was very small. Many dry seeds which fell down were also seen and the difficulty of natural regeneration was indicated. However, seedling succeeded in natural regeneration had growth better than direct planting once. One guard was employed for the patrol of a protected area.

NRWGO set up the protected area of 1,200ha in 2003, and they installed fence in 2006. Persian oak forest of this area has tree height 5-10m, stand intervals 10-20m, a sparse forest. Although the oak regeneration method in the protected area was; "not planting seedlings but seeding". And seedling by natural regeneration was observed in the protected area, but its number was very few. Many of seeds fallen on the ground were observed un-active and this situation indicated difficulty of natural regeneration. However, once natural regeneration succeeded these seedlings showed better growth than the directly sown seedlings. A guardsman was employed for patrol of protected rea.

③ NRWGO nursery in Lordegan

Area of the nursery is 19.5ha, and the water supply to seedlings was carried out by drip irrigation system. Although the seedling of the walnut was produced till 2006, species was changed to Poplar in 2006 and afterwards. Nursing of Pistachio was begun from 2008. The seeds of the Pistachio were acquired from Kerman province, and sown in vinyl house. Transplanting of the seedling to nursery was planned 1 year after sowing. Quantity of fruits from a Pistachio is expected as 12 kg.

④ NRWGO nursery in Shahrekord

The nursery was established in 1985 by NRWGO. Area of the nursery was 40 ha and actual 32 ha was used seedling production. Species under production is mainly Poplar and the water supply was conducted from two wells (60-70m depth) in the nursery site. The number of seedlings production was 300,000-2,500,000 seedlings per year (the number changes year by years).

The nursery is operated by NRWGO staffs and a nursery manager, a supervisor of nursery work and two guards were employed. Seedlings nursing works are conducted by an entrusted private corporation and the produced seedlings are sold to city offices and citizens, etc. According to nursery manager, seedlings of Persian oak were produced also by the nursery till 1995. But the growth of the seedlings planted in the mountain areas was poor so that there is no production now. He said that if the project needs seedlings, and if necessary numbers were requested, the nursery will prepare them.

3) NRWGO's operational policy

Present situation survey and analysis on NRWGO's organization, function and present activities were conducted. And also evaluation and analysis of NRWGO operation, case studies in Tarom villages and others, and NRWGO works concerning land management system and local communities, and measures taken for forest and rangeland recovery and watershed management were conducted.

In a Document of natural resources and watershed management (Vision 2025) of the Chaharmahal -va-Bakhtiari province it is clearly stated that peoples participation in the management and utilization of natural resources shall be activated. And also policy of NRWGO focuses on encouragement of community participation and awareness raising of local residence for efficient management are indispensable for sustainable utilization of natural resources. Above mentioned, NRWGO's vision 2025 is still active in the 6th 5 year plan in 2016 as a basic policy.

4) Present situation of forest and rangeland in the target villages of the project

Natural and social environment information which are necessary for operation in the target villages selected during the 1st year were the information of precondition for the activity for the Output 3, so that these are described in the Output 3 of PDM; participatory forest and rangeland management activities in the target villages.

(3) Based on information and data acquired, the project baseline survey report drafted

The project baseline survey report, implementing various kind of surveys were conducted in parallel, then compiled as 2 reports as below;

① Socio-economic survey report on selected 10 villages;" House hold sample survey, conducted by Shahrekord University as re-entrusted contract base

② village base Socio-economic overview survey for selected 5 pilot villages; Compiled summary report, composed of PRA survey and key informant interview survey

(4) Capacity Development strategy report preparation, extracting lessons learned and method for improvement from similar project

Capacity Development strategy for NRWGO means NRWGO to demonstrate its capacity that various multiple elements of capacities concerned shall be took into count. The project has to take the various elements into count to implement technology transfer through the pilot project activities implementation

During the 1st year, case studies in province and interviews for similar project, etc. were conducted and lessons learned and measures for improvement were discussed.

Works for understanding of NRWGO organization, function and present activities, evaluation works of NRWGO operation conducting case study in Tarom villages, etc., analysis works on NRWGO's operation, land management system and local communities and measures taken for forest and rangeland recovery and watershed management had been conducted.

And as for preparation work on implementation of “achieved result; Output 2, 3, 4”, following items was studied; i) Characteristic of Nature and society oriented technology, ii) Coordination and compromise with C/Ps' usual business, iii) Participatory method application as technical government organization, iv) Participatory method, v) Community Facilitators (CFs), vi) Necessity of dialogue and consensus building between NRWGO experts and villagers, vii) Villagers' participation in operation stage.

(5) Training plan on participatory forest and rangeland for NRWGO staffs are formulated

Problems to be solved for the staff training were surveyed at the project starting stage.

As a result, training system is already established on the training which have been implemented by NRWGO, some issues were appeared that; ①in-sufficient management control system, ②in-sufficient training materials, ③NRWGO do not have own training facilities. And it was understood that dealing with problems such as; ①Loose time management; assigned trainee are not participate as time scheduled, ② On contents of the training, lecture for Iranian general information share are high, and less locally specified situation reflected lecture are a few, and on lecture method. Oral lecture are much and lecture using” power point, etc.” are very few that lecture which try to deepen trainees understanding also are less.

Also it was understood that NRWGO do not have own training facilities.

Objective trainees were identified as 86 technical staffs within all NRWGO staffs, including 47 from head Office, 39 from 7 NRWGO. But in the implementation stage, not only official staffs but un-official staffs also included as training candidate.

Training needs survey was conducted and it was understood that; considering capacity to be equipped and uplifted which are necessary for implementation of participatory forest and rangeland project, and based on mutual trust between villagers are not built at present, it seemed that “abilities to meet demand from villagers shall be constructed, and thus villager trusted environment shall be built” is fundamentally necessary. To put it concrete, if there are question and/or request from villagers, staffs shall not reject to respond as out of hand or ad hoc answer, but kindly take the question and/or request back and inform the villager related information or answer it after consultation to expert concerned, thus, acquire trust from villagers.

To meet the kind of demand, basic policy of training implementation was decided as; not to get deep knowledge for specialist, but to get wide range of information which enables to respond for villagers.

Based on the above, training implementation plan to serve required minimum information for the staffs as objective of the training were established. After basic training subject of study plan forming, subject needs survey for NRWGO staffs were conducted and training module was decided.

The decided training module is seen as following table. The contents of training module and concept of the training are composed of 3 kind of contents as; necessary knowledge preparation to contact with villagers, upgrade daily work capacity to make smooth implementation of people's participatory project and reconstruction of staffs consciousness.

Table 2-5 List of training module

Module	Contents
1	PCM, PRA, Participatory Method
2	GIS, Remote Sensing
3	GPS, Simple Survey Method
4	Method of information collection
5	Forest & Rangeland Ecology (Forest Ecology, Rangeland Ecology, Climate Change)
6	Rangeland Management
7	Forest Fire, Pest & Disease, Bird & Animal Damage
8	Forestry (Minor Forest Produce, Tending, Propagation)
9	Recreation, Park Management, Ecotourism, Forest Reserve
10	Introduction to sample cases in Iran
11	Fish Culture, Poultry, Apiculture
12	Agroforestry, Reforestation, Horticulture
13	Cooperative, Wealth building, Marketing
14	Erosion Control
15	Innovation in Natural Resources Management

To conduct the training module as planned, 5 years aggregated staff training plan was formulated. Implement 3-4 modules as minimum were allocated, during JICA expert stay in every year and planned to finish all of module and subject which were planned to implement during within 5 years.

As NRWGO do not have own training facility in nursery that warehouse in NRWGO nursery was reformed for the training before start of 1st year training term. Joint operation for arrangement of the training room was conducted as; JICA prepared such equipment as, projector, desk, chair, locker, etc., while NRWGO prepared heating facility, wall painting, etc.

(6) Implementation of Training

The training were implemented during the first year is following.

Table 2-6 Training implemented during the 1st year is as tabled below

Period		Module/ Training Course		Number of Trainee
1 st year	2010	Oct. 16 - 19	① PCM for Managerial Position	27
		Oct. 24- 25	① PRA for Managerial Position	27
	2011	Feb. 14-16	① PCM for NRWGO Staff	18
		Feb. 15	① PRA for CP	6

(7) Capacity development training impact survey among NRWGO staffs is monitored and has feedback

On the survey and feedback, “JICA project training contents evaluation questionnaire for the trainee”, was circulated, as the training business as usual, in after every training subject and have trainee’s comment. The questionnaire is composed of 4 question and 1 comment column. The evaluation table is analyzed and valuable comments are used as feedback to improve the training to be conducted after 2nd year.

2.2.2.2 Achieved results of the 2nd year

(1) Capacity Development strategy report preparation, extracting lessons learned and method for improvement from similar project

Continuous works for basic data/material collection had implemented. And supplement oral listing survey on, history of villager's land right owner and utilization right on forest and rangeland, land utilization procedure and reality in the National Land, consciousness of villagers on forest and rangeland management by NRWGO, and consciousness on historical land ownership had conducted.

Necessary supplement writing and amendment for 1st year CD strategy report (draft) was conducted, based on comments from C/Ps and lessons learned from supplement survey, and Persian version production was also started

(2) Preparation of the project base line survey report, basing on acquired information and data

Village survey on Robotkuh village, which is seasonal immigrant village, in Tarom and Robotkuh village was conducted using PRA method. Independently drafted village development plan (draft) by cooperative in the village was submitted to the project. This information was treated as additional information for compiled 1st year base line survey.

(3) Training plan for NRWGO staffs on participatory forest and rangeland management are prepared

On the 2nd year staffs training contents Basic training policy were discussed with C/P for training and Director general of NRWGO, including 5 years general training plan, lecturers, place of training, field study, training time span, training cost sharing, etc., these were drafted in 1st year.

Concrete plan on training subject and its daily schedule was decided, considering and arranging results of needs survey for trainee, available term for the training and schedule of lecturers

(4) Implementation of the training

The training were implemented during the second year is following.

Table 2-7 Implemented training during the 2nd year is listed as below:

Period		Module/ Training Course		Number
2 nd year	2011	Jun. 25-27	⑤ Forest ecology, effect of forest vegetation cover for climate change	23
		Jun. 28-29	④ MS word and Excel	18
		July 5-7	① PRA, People`s Participatory Method	24
		Jul. 10-12	⑤ Rangeland ecology	18
		Jul. 18-20	② GIS, Remote sensing	20
		Jul. 18	③ GPS, Simple survey Method	7
		Oct. 11-13	⑦ Forest fire and its prevention, pest and disease and its prevention, bird and animal damages and its prevention	36
		Oct. 16, 18-19	⑥ Rangeland management	30
		Oct. 22-24	⑧ Tending, vegetative propagation, planting ⑫ Agro-forestry	36
		Oct. 25-26	⑮ New idea/Method/technology introduction for natural regeneration	36

(5) Impact monitoring on the capacity building training among NRWGO staffs and its feed back

Training Evaluation table were requested to fill up by each trainee at each end of the training course and asked trainee's opinion. Most of trainees positively respond on the contents that they were valuable, easy to understand, could get new information. While there were request concerning training time scheduling and practices, etc... and also there were request to issue a formal certificate of lecture attendance, then after taking into consideration, the above issue was reflected to the possible training after the 3rd years.

2.2.2.3 Achieved results of the 3rd year

(1) grasping of subject to be solved and concerned activities on participatory forest and rangeland

1) Land ownership and utilization right issues

Through operations in the pilot villages, it was get cleared that land ownership and land utilization concerned rights have not defined clearly among concerned parties, that supplement hearing survey have conducted in Tabarak Sofla, Mazerashte and Durack Sofla village.

Agriculture land in the village lowland are mostly divided as private land, and up side of behind agriculture land, higher elevation, sloppy and trees grown area and highland rangeland and up side of them are mostly be classified as national land and have been managed by NRWGO.

But villagers and national government are struggling still on the land utilization issues, villagers are cultivating wheat and Barley, etc., in gentle slope national land area. Thus, it was clearly understood that self-governing rule/habit for land conservation and for land productivity maintenance by village community or tribes are not working. Before, so called, the land reforms, grazing number of animals had controlled by land owners (local lord) and NRWGO succeeded the role after the revolution, but they don't have effective measure to manage them and also villagers who were assigned as conservation patrol man also don't have enough right and authority for national land conservation.

2) Low and Policy change

Continuous works for basic data/material collection including "The low of increasing productivity of agriculture and natural resources". The low seemed effective from 2 years ago, but on operation level, after Project Director, Mr. Garshasbi indication on flexible application of low, based on its low concept, for forest and rangeland management in 3rd year JCC, attitude of NRWGO staffs concerned have change to promote production activities in national land.

3) Information collection of similar cases

① Survey on nomads winter Lodging area in Khuzestan province

Lodging area during winter season grazing nomad in Bazoft are in Khuzesten province. Most of the nomad immigrates to Andikah area, Khuzestan province.

The project surveyed immigrant root of Bazoft area to Khuzestan province and winter seasonal lodging area. As a result; 1) decreased trend of grass and animal drinking water supply because of drought and less rain trend 2) less grass feeding area of immigrant period, because of road construction, development and resident population increase up along the road 3) Shortened immigration term by using animal transportation track and the road. Especially, real grazing period have got started earlier than traditional era, and grass in grazing area have eaten before the seeds mature/ spread, and that getting less seeds supply for regeneration in next year, which are causing 1 year grass recovery impossible.

② Survey on UNDP/GEF Carbon sequestration project in Birjand, south Khorasan province

The UNDP/GEF project has conducted in dry plain zone and was 3rd year of 2nd phase stage. Participatory work in phase (I) were, Village Development Group(VDG) forming and activities implementation on rail and large scale vegetation recovery operation and during the phase(II), scope of works get widened in operation area, inter-sector, and organizational collaboration and preparation for self-supported activities after the project end, vegetation recovery activities were continued, as well.

There was similarity with the project that the project has conducted vegetation recovery (Carbon fixation) activities by group activities using participatory methods. It was impressive that the UNDP project introduced micro-credit activities from the initial stage, using existed women Islamic text study group as entry point. And for village development measure, large scale vegetation recovery operation has created lift up opportunity of income for villagers, which seemed effective.

(2) Capacity Development strategy report compilation

Accepting recommendation of mid-term review team, to improve the contents, sub-divided its contents as 1st and 2nd division. 1st division, named as “Activity strategy for Capacity Development strategy for NRWGO” , which was re-compiled based on survey and analysis of actual condition of the field, and 2nd division, named as “consideration of various elements for the Capacity Development of NRWGO” which was re-compiled as Basic Information and analysis, including various elements to be considered for formulation of strategy.

(3) Training plan for NRWGO staffs on participatory forest and rangeland management are prepared

Based on 1st year training plan, in which training subjects were re-grouping into 15 modules, based on 1st year survey on NRWGO training reality and training needs, 3rd year training plan was confirmed with C/P during April and May. Training implementation on courses of Forest ecosystem, rangeland ecology, prevention of pest and diseases, GIS, GPS, remote sensing, new ideas for natural resources management, observation of participatory project have confirmed. On PCM course, training site plan, conduct at not only Shahrekord but include in offices of NRWO in province, was designed.

(4) Implementation of the training

The training were implemented during the third year is following.

Table 2-8 Trainings implemented during 3rd years are tabled as below;

Period		Module/ Training Course		Number
3 rd year	2012	Mar. 8-9	① PCM for NRWGO Staff	8
		May 14-15	① PCM for NRWGO Staff	8
		May 20-21	① PCM for NRWGO Staff	17
		May 23-24	① PCM for NRWGO Staff	12
		May 26	① PCM for NRWGO Staff	11
		Sep. 25, 29-30	⑨ Ecotourism	16(19)
		Oct. 6-7	⑦ Pest & Disease Control	27
		Oct. 9-11	③ GPS	30
		Oct. 13-15	⑧ Zagros Type Forests & Forest Management	12 (20)
		Oct. 20-23	⑩ Site Visit To Sarbisheh UNDP Carbon Sink Project, South Khorasan Province	28
		Oct. 28-30	⑭ Erosion control	15 (17)
Nov. 4-6	⑫ Horticulture	9(10)		

(5) Impact monitoring on the capacity building training among NRWGO staffs and its feed back

Training Evaluation table were requested to fill up by each trainee at each end of the training course and asked trainee's opinion. Most of trainees positively respond on the contents that they were valuable, easy to understand, could get new information. Major opinion expressed with hope were; "continuous implementation of training course", "more time shall be allocated for each course", "increase in field observation and increase in practical activities" and "site visit for other participatory project in other province" etc..

And based on mid-term review recommendation, for feedback of JICA project activities in Bazoft area and for better understanding of the project activities by NRWGO staffs, a course was decided, which of contents include; contents of the project activities, implementation process, measure taken to invite villages for participation, the participatory level for the project and response/impression on the participation, as a training course.

2.2.2.4 Achieved results of the 4th year

(1) Capacity Development strategy for NRWGO is prepared

1) Preparation activity of CD activities strategy report

Seminar for dissemination of CD activity strategy report, compiled in 3rd year, was conducted. Around 50 participants, including JCC members, Directors and/or Deputy for watershed management concerned from Karoon river concerned provincial NRWGO, and staff from budget division of provincial government and Deputy director general of Agriculture Ministry of the province. Provincial NRWGO operated participatory project experiences were presented and unreserved opinion and request were expressed.

2) Utilize knowledge of similar project (new participatory method and its enhancement)

Trainings conducted by JICA Agricultural project in Golestan province which of lecturer Mr. NAKATA Toyochi, JICA short term expert, and they learned basic concept by the course.

It is said key importance in the Meta-facilitation that a process of; to do "question concerning fact (fact question)", real truth were acknowledged by questioned side, he notice on the fact, then it is expected that it will affect to behavior change. In brief, method/skill identified as "wait until the responder notice by him by the fact base question, and also until he can grow independently participate on some activity", also the method can be identified as, in narrow sense, "a communication skill".

3) Examination of provincial budget utilization, etc.

Talking with C/Ps on a topic of "Strengthening of sustainability", it was basic policy/direction that especially on a part concerned to Community Development sector are not essential and obligatory work for NRWGO that resources of concerned organization like MOJA (JAO), etc. shall be utilized on operation and also, on budget matters, utilization of budget from provincial planning and budget department is necessary. And decide to make efforts to utilize resources of the concerned organizations.

(2) Training plan for NRWGO staffs on participatory forest and rangeland management are prepared

Based on 1st year training plan drafted with survey on NRWGO training reality and training needs, 4th year training plan was confirmed with C/P during April and May.

And following 3 points, which were raised from trainees of the 3rd year, was taken into the plan when the training plan was draft.

1) Implementation of remained course in the training module

During the 3rd year, 9 modules out of 15 modules were completed, but 6 modules were still remained. That considering condition of NRWGO's needs and availability of lecturer for specific topics, etc., training plan was drafted, keeping in mind that remained module/courses will be implemented within the year 2113.

2) Feedback in the CD Training program from the project activities

Following with the mid-term review recommendation, training implementation to reflect feedback from the achieved results of the project activities was planned.

3) Other concerned subject

To meet demand from busy NRWGO staffs requirement, the training sector has made effort to speed up training plan formulation process and early arrangement and confirmation of training participants.

(3) Implementation of training

The training were implemented during the forth year is following.

Table 2-9 Training courses implemented during the 4th year are tabled as below;

		Period		Module/ Training Course	Number
4 th year	2013	Apr. 4/16-17	①	PCM for NRWGO Staff	8
		Apr. 20-21	①	PCM for NRWGO Staff	10
		Apr. 29	①	PCM for NRWGO Staff	7
		Aug. 20-25	②	Remote sensing	14 (15)
		Aug. 27-29	① ⑬ ⑮	Stakeholders Participation in the Management of Natural Resources Course	13(15)
		Sep. 3-5	① ⑬ ⑮	Facilitation in Participatory Natural Resources Management Course	10(24)
		Sep. 14-16	⑭	Erosion Hazard Prediction Course	16(17)
		Sep. 23-25	⑪	Minor Non-Wooden Forest Products	15 (18)
		Sep. 28-30	②	Method of Aerial Interpretation	20(27)
		Oct. 26-27	②	Method of Aerial Interpretation	
		Oct. 1-3	⑩	Visit to MENARID Project in Bahabad, Yazd Province	23
		Oct. 11-14	⑩	Site visit to: Hablehroud projects in Ferozkoh, Tehran Province & Garmsar, Samnan Province)	20(22)
		Oct. 22-23	⑮	Innovation in Natural Resources Management Course	22
		Sep. 17	⑮	Seminar on JICA Project Aims & Activities	36
		Dec. 29-30	⑥	Reporting in Natural Resources for Judicial Authorities	25
	2014	Jan. 4-6	⑥	NRWGO Policy in Rangeland	23
		Jan. 7	⑮	Visit of JICA Project Activities in Bazoft (by NRWGO & Provincial MOJA Staffs)	22
Jan. 11-13		⑦	Firefighting Techniques Principal Fire Extinguish	50	

(4) Impact monitoring on the capacity building training among NRWGO staffs and its feed back

Training Evaluation table were requested to fill up by each trainee at each end of the training course and asked trainee's opinion. Most of trainees positively respond on the contents that they were valuable, easy to understand, could get new information. Major opinion expressed with hope were; "continuous implementation of training course", "more time shall be allocated for each course", "increase in field observation and increase in practical activities" and "site visit for other participatory project in other province" etc..

During the 4th year, examination for lecture and field works were conducted for some of the training courses participants, were put ranking, applying 5 categories rule of agriculture training institute, and certificate were submitted.

And it was noted that, within absent period of Japanese expert, C/P have managed 3 courses by them-selves on courses of; "report making to meet demand by court", "NRWGO's policy on rangeland and forest management" and "forest fire and combat to fire activities".

2.2.2.5 Achieved results of the 5th year

(1) Training plan for NRWGO staffs on participatory forest and rangeland management are prepared

In the 5th year PCM training was carried out for the MENARID's staff concerned in order to clarify the meetings between MENARID's staff concerned and project C/P or contents of the MENARID project.

(2) Implementation of training

The training were implemented during the fifth year is following.

Table 2-10 Training implemented during the 5th year is listed as below;

Period		Module/ Training Course		Number	
5 th year	2014	May 24-25	①	PCM for NRWGO Staff	12(13)
		May 26	①	PCM for NRWGO Staff	4
		Oct. 14-16 Nov. 5	③	GPS	13
		Oct. 27-30	⑩	Site visit to NRWGO Project in Fārs and Ostān-e Kohgīrūye-o Būyer-Ahmad Province	24
		Nov. 16-19	⑨	Forest Park Management	15
	2015	Jan. 18-19	①	PRA for NRWGO Staff	17
		Jan. 20-23	⑩	Site visit to UNDP Project in Markazi Province	26
		Feb. 1	①	PCM for NRWGO Staff	13

(3) Impact monitoring on the capacity building training among NRWGO staffs and its feed back

The project performed "just after training questionnaire survey", as every year's business as usual, and the result were used for feedback for next year's training. In addition, at the end of the fifth year, project and NRWGO performed a questionnaire survey for all trainees who attended the training course.

1) Result of Questionnaire survey about 5th years Training

This questionnaire include 9 items; (a)official position, (b) work period in NRWGO, (c) Useful training program for your works, (d) Detail of the useful training contents, (e) possible useful training

program, (f) useful for your future works, (g) should be added to the training program (h) on five rank system, () The new project that adopted result after the training (Background, Duration, Target area, Target group, Budget, Outputs, Activities).

The number of targeted trainee for the questionnaire survey by the project was 154 among total trainee of 170 who attended on the training courses. The numbers of the effective answers were 154.

On impression for the trainings as a whole, over four or five points of maximum five point shared more than 70% of the whole respondent, and, according to this result, the training was accepted mostly as favorable. Breakdown of the score distribution is shown in a table of “5 stage evaluation” as below:

Table 2-11 Five stage evaluation for trainings as a whole

	1 <i>(Poor)</i>	2	3	4	5 <i>(Excellent)</i>	non	Sub-total
Permanent Staff	3	5	19	51	25	4	107
Tentative Staff		1	12	21	12	1	47
Total	3	6	31	72	37	5	154

In addition, about meaning of useful training, there were many respondents that his knowledge base become rich, understanding was deepened through conducted practices. Particularly, High evaluation score were given from field staffs namely; "GIS training" to support map information which is necessary for villagers to propose land use, "GPS training" to use it in measuring, "Aerial photo interpretation training" to understand site situation, "the Excel calculation and the Word documentation" to arrange data.

In addition, the trainees were able to know the scientific information about the grazing land, and which led to lift up foundations of staff ability. Contents of the training, served as a reference, was summarized in “Table 2.2.4.4 Useful training items at present “.

Table 2-12 Useful training items at present

Module and Training Course	Regular Staff	Tentative Staff
① PCM Method	37	19
①PRA、	10	
① ⑮ Facilitation in Participatory Natural Resources Management Course	8	3
② GIS	16	2
③ Method of Aerial Interpretation	19	4
④ Remote sensing	13	1
② GPS	28	4
③ MS word and Excel	6	1
④ Reporting in Natural Resources for Judicial Authorities	8	10
⑤ Forest ecology, effect of forest vegetation cover for climate change	9	1
⑥ Zagros Type Forests & Forest Management	9	5
⑤ Rangeland ecology	13	6
⑥ NRWGO Policy in Rangeland	8	1

⑦ Firefighting Techniques Principal Fire Extinguish	19	17
⑧ Pest & Disease Control	12	9
⑨ Minor Forest Produce (medical herb)	8	1
⑦ Horticulture	3	
⑨ Ecotourism	7	3
⑩ Introduction to sample cases in Iran	49	18
⑪ Agroforestry	6	1
⑭ Erosion control & Erosion Hazard Prediction Course	18	1
⑮ Seminar on JICA Project Aims & Activities	4	3
⑮ Innovation in Natural Resources Management Course	16	

Particularly, three items, of which there were many evaluation respondents, were "①PCM Method", "③ Forest fire and firefighting measures", and "⑬Introduction of the model cases in Iran".

There were views on "①PCM method" as; "①PCM Method that ideas were well arranged and used to solve problems in his office, and PDM was used to explain contents of a project which made easy to be understood

As for the "⑨forest fire and the firefighting measures", there were many opinions from participants of local staffs that they were well understood on the handling methods .

Contents of the training on " ⑬ introduction of the model example in Iran" were observation for activities in other provinces.

From the third year, the project carried out training by observation tour to participation type project in other provinces including UNDP project. It is assumed that the type of trainings have effect greatly to change way of thinking of NRWGO staffs., because the training provide new knowledge, new technology and bodily be felt experiences and that, after the training, trainees are willing to introduce them as a part of his job or beginning to consider to introduce them.

Contents of some observation tour type trainings are shown below.

In the third year, the project carried out observation tour type training of "the carbon dioxide fixation project" of south Khorasan province, UNDP/GEF. Natural environments is not similar to our project, but they had same problems; such as the overgrazing issues, illegal cutting of the firewood purpose.

"Establishment of the small supermarket", "Carpet making", "Dressmaking", "Breeding of cow and chicken which are not cause overgrazing", "Fattening of domestic animal", "Extract essence of medicinal herb", etc., were the project activities to uplift villager's income.

And, for reduction of the forest use pressure, the project introduced "solar light -electricity generation", "wind power- electricity generation, and "bio-gas use as fuel source". For such activities, woman power was positively utilized. In addition, the NRWGO observation member found a fact that the women were using micro-credit system as their funding sources, whose experience provided a big factor of impact to reform NRWGO's consciousness on the field.

In the fourth year, the project carried out observation tour type training of "the MENARID project in Bagbad area of Yazd province", "Hablerud project in Firuzkuh area of Teheran province" and Garamsar area in the Semnan province". It is assumed that these observation tour also were equally effective.

In the fifth year, the project carried out observation tour type training of "the UNDP project of the Markazi province" and the "NRWGO project of in Kohgiluyeh and Boyer-Ahmad province and the Fars

province”.

UNDP projects commonly apply ideas of; micro-credit, organization, uplift livelihood.

Also, it was commonly being observed that NRWGO initiated and independently conducted projects have spent long years and have achieved excellent outputs.

The NRWGO in Kohgiluyeh and Boyer-Ahmad province have carried out a project with a local farmer more than 20 years. The project have not rely on natural regeneration, but the project have made efforts to increase natural resources by artificial measures as; planting trees and sowing medicinal plants.

These were, for most of trainee, already understood thorough lecture or reading books, etc... However, they could observe real activities of planting trees in the forests and growing “Anghoze; medical herb” in the field

And in Estahban of Fars province, the concrete cultivation method of Fig which has 300 years history of cultivation was understood.

And, an original NRWGO’s project of Sedeh in Fars province was activities in the past more than 20 years ago. The purpose of this project was domiciliation of nomadic herders. The project allocated 10 hectares land per family group for use.

Initial condition of the targeted site was; vegetation was completely corrupted by over grazing and NRWGO designed Almond and Apple forest establishment and Achievement of livelihood improvement. In the project, reduction of number of animal head was not a condition for participation to the project, which of condition may not be applicable for Chahalmahal-va-Bahtiyari Province

In this project, respecting villagers will and aiming as villager’s livelihood improvement, Almond and Apple forest were established, and now they are grown as income source.

Even there are argument on the enforcement method is right or wrong, Through watching a success example, the project prepared precious field and chance to review “what and how NRWGO should perform from now”.

On the other hand, the trainees were able to understand that the project also have had troubles with villagers before the project have got on track, like Chaharmahal-va-Bakhtiari Province

2) Result of end of training follow-up survey by NRWGO

Separately and independently from the project, NRWGO carried out a questionnaire survey, covering all of NRWGO training activities for all staffs of NRWGO, including the clerical workers.

There was item about the training of the JICA project in the survey. According to the survey, almost positive comments were listed for the training of JICA. Examples of which were; "Were able to raise ability of the work", "Became a motivation to be able to work more positively for works", " What I could know projects of other provinces was good for me ", "Were effective in raising technical knowledge", "The training of PRA had good influence for my staffs”.

On the other hand, such different opinions also were listed: “Because there was not conducted continuously that influence was intermittent”, "Were able to know new Method, but more supplementary course is necessary", "Only for technical staff, clerical officers were not able to participate", etc.

3) Reflection from output of the training to NRWGO’s works

According to answer for the questionnaire, shared almost all of opinion were that the training helped improvement of the usual business.

A Case reported as an example on trained/learned result was used for NRWGO operation was that;

seedling preparation/gift in Daloura area and Felard area in Lordegan district, which were continuous work, but using forest preservation budget for Zagros, learned result was put in for the works.

Cases of trained result reflected new projects are listed as; "the new project in which trained result were put in "

In addition, answers for a question; there were no opportunity to use under the present conditions, but it will become useful all in future. There were many responses as; "Laws related to the land affairs", "Survey/Measurement", "Land-registration book", "Aerial photo interpretation", "GIS".

Among activities of NRWGO, land propriety rights, re-arrangement of utilization right are and will be a core of their duties.

These training courses are considered as fundamental field for smooth implementation from now on, including participatory operation.

Table 2-13 the new project that adopted outputs of training

Project name	Period	Location	Activities
Development of orchard	Two years	Lordegan district Ganj village	Technical support; supplying materials for people; supervising the people
Development of orchard	One year	Lordegan district Ghare village	Motivating people and holding training courses for development of orchard and establishing cooperatives. At present we are following up the processes of the project.
Fig planting project	Undecided	Lordegan district	Introduction of the fig to forest deterioration area
Cultivation of medicinal plants	2 months	Boroujen district, Choghakhor of Boldaji	supplying seed; expert's opinion for guiding people
Rain-fed fig plantation related to article 3 projects	Undecided	Ardal district, Miyankouh area	To hold meeting in governor office, to hold meeting with people, to attract participation of people, to establish natural resources cooperative, to make article 3 file and send it to technical committee
Finding the problems related to livelihood of stakeholders, multipurpose forestry in Lordegan and Bazoft, establishing cooperatives of Bazoft and Lordegan	Undecided	Bazoft Area and Lordegan Area	Development of forest by seedling, enrichment by seed and seedling, cultivation of medicinal plants, supplying fuel, making conservative belt
Cultivation of seedling (related to watershed management office)	Undecided	Soulejan	5000 seedlings production of the villagers participation type

Ghalatak soil Dam project	3 years	Kiar district	Sediment and erosion control
Watershed management project	2 months	Ben district larak district	Sediment and erosion control
Cultivation and utilization of Anghuze (Ferula assa-foetida) and Barije (Ferula gummosa) for an area of 20 hectare	Undecided	Saman district Markade area	Map making; solving problems of livestock grazers; supplying seed; Training on cultivation to livestock grazers and executors of rangeland management plans
Seeding and sowing of rangelands & Forest enrichment	Summer ... autumn 2014	Bazoft district Chery pass, Mt. Roghani	Regeneration of degraded rangelands and enrichment of weak forests
Rangeland momayezi in Kouh sukhte (Dastena), Ben, Toumanak	One month	Ben district Dastena, Toumanak	Identification of livestock beneficiaries of livestock grazing area; determining capacity of rangelands; specifying the date of livestock entry and exit
Cultivation of medicinal plants & Establishing cooperative of livestock grazers	Undecided	Ben district Karsenak area	Vegetation recovery and medicinal herb cultivation by the pasturage license owner
Terracing and cultivation of rain-fed almond	Undecided	Lordegan district Gandab	Afforestation and development of green space, conservation of soil and water, income generation, participation of people in watershed management and natural resources plans
Solar heater	Undecided	Lordegan district behind Sate and Milas mountains	Installing solar heater in forestry areas
MENARID	Five years	A state	The training of a farmer targeted for the basin management project and the staff of the cooperate

In addition, about MENARID in the above list, it is said that results of observation of other province through the JICA training prepared a chance of NRWGO in Chaharmahal-va-Bakhtiari Province introduced the MENARID project.

MENARID is to carry out their training to persons in charge, participating farmer and person in charge in concerned organizations. However, situation is; the implementing areas are decided at present, but the concrete training contents is not yet decided.

Therefore, the project provides the teaching materials and human resources information of the project for the MENARID training, for the purpose that the MENARID training can use them effectively.

2.2.2.6 Achieved results of the extended phase

(1) Revision of Capacity Development Strategy report

Because actual implementation term of the extended phase was from September 2015 to December 2016, Capacity Development Strategy for NRWGO and experts was planned and compiled, as a part of necessary works to be implemented within September, the necessary works include; PDM, Work Plan, making of CD strategy report, approval by JCC.

And to guarantee sustainable project activities by NRWGO and extension in the province after the project end, the project has supported NRWGO's participatory forest and rangeland project coordination committee (PCC) and NRWGO's implementation plan making; support for new budget code in provincial MPO.

The Capacity Development Strategy report was compiled based on PDM and Work Plan which were agreed through serial discussion with NRWGO/FRWO, by Capacity Development Strategy report drafting group.

Main contents are; concept of the strategy is implementation policy of the extended phase to improve part of low sustainability that basic strategy of the project implementation from start was maintained. And figure of "Exit strategy", in which important items to be implemented during the extended phase were summarized. The "Exit strategy" was used to explain for in and out of the project. And also, guideline edit group used it to establish participatory forest and rangeland management model, breaking "Exit strategy" into parts and analyze the project implemented result.

(2) Participatory forest and rangeland project coordination committee (PCC)

The Participatory forest and rangeland project coordination committee (PCC) establishment designed , proposed and established in October 2015 aiming to set up common platform for exchange information and discussion on project specific subject and inter-project subject, because NRWGO implemented participatory projects were increased as; "2010 year initiated JICA participatory forest and rangeland project , 2014 year initiated MENARID extended phase, 2014 year initiated IWM and National land conservation department implemented 2015 year initiated Participatory Protection Project (PPP project, as abbreviation), also it is called Green Belt project.

PCC Regulation was considered and decided during December 2015 to June 2016. The main frame of the regulation were; NRWGO Director General serves as a chairman, Chief of Engineering office serves as secretary, committee members are composed of JICA project member, participatory project mentioned above, representative of cooperative and NGO from out of NRWGO, which of total number of the committee members are approximately 20, the member can propose topics to be discussed, committee members are invited when the proposal was adapted and have consultative meeting

PCC meeting for introduction and discussion meeting on a VAP (draft) was held in July 2016, and discussion meeting on Case study on VAP Fig plantation in Mazerashthe village in October 2016. At the July meeting, members from the Project, MENARID (watershed management division), PPP and from representative of provincial federal rangeland cooperative, etc. were meet together and free and active discussion were observed.

(3) Support for implementation plan making (support to get provincial PBO budget)

Plan and budget is one united package that practical meaning of "Support for Implementation Plan making" is side support of NRWGO's activity toward Provincial PBO to get Provincial budget.

Director of Provincial Planning and budget Department, Mr. Amery, who was one of target for collaboration during 4th-5th year, announced as guest speech in JCC in October 2015 that the department will support the project. After that, the Provincial Planning and Budget Organization was resumed and reformed as Provincial PBO. Head of budget planning department in provincial government transfer to Director General of Provincial PBO but in July 2016 he retired, then from BPO head office in Tehran succeeded the post as New Director General of provincial PBO.

On the post project budget request and in take to NRWGO from the Provincial Planning and budget Department and Provincial PBO have been continued mainly by Planning and Logistic deputy and expert of Budget section in NRWGO The project continuously supported by way of; preparation of the project operation budget from JICA and meeting with Director of Provincial Planning and budget Department by and with concerned experts and C/Ps, and budget code of MENARID only was realized in the 5th year. PBO head office, participated on training in Japan, and using the environment, the project requested to him to support post project.

In June 2016, Iranian budget concerned survey team, composed of MPO head office, staffs of MOJA International section, etc., conducted the project inspection. 1day was spent for field activities observation survey, and next day, budget concerned meeting was held and Deputy of the provincial PBO also was attended. NRWGO Planning and Logistic division and the project have got time to explain to just arrive new Director General of the Provincial PBO. The new Director General of the Provincial PBO, made a verbal promise to create budget code for participatory forest and rangeland management

After that, NRWGO Planning and Logistic department have continuously submitted materials and explained to the Provincial PBO, and in October- November 2016, 2 kinds of concerned budget code was created. Provincial MPO; participatory forest and rangeland management (budget for MENARID and JICA project) and Koohrang district PBO budget code (mostly for following up JICA project).

(4) Training plan for NRWGO staffs on participatory forest and rangeland management are prepared

During the extended phase, based on the final evaluation, basic direction/policy was decided as; “To promote understanding of participatory operation for the staffs”, “ To improve illegal activities control capacity of guard man” and “ To improve extension offices, who are important human resources, to proceed peoples participated operation”, and implemented.

(5) Implementation of the staff Training

The trainings implemented during the extended phase were as follows;

Table 2-14 Results of training during the extended phase

Year	Date	Name of training course	Number of participants
2015	27, 28 of October	Capacity of Community Facilitator	48
2016	4, March	Micro-credit Box	6
	17, February	Environment Education	200※
	10-13, May	Observation tour of Planting activities by woman venture corporation on” Forest School” in Razavi Khorasan Province	16
	5, July	Forest and rangeland Firefighting training	102
	11, July	Improvement of capacity on illegal activities control in Lordegan district	30

	7, August	improvement of capacity on illegal activities control in other than Lordegan district	24
	15,16, October	National boarder identification concerned law	58
	30, October	Communication skill to talk for children	26
	9, November	Nursery training	30

※ The number include not only NRWGO staffs, but Education and University concerned attendant

(6) Impact monitoring on the capacity building training among NRWGO staffs and its feed back

1) Firefighting Training

Firefighting training participants were mainly the guard man who works in the front line of forest and rangeland firefighting equipments and machines, and also there were staffs and guardsman who have no experience in touch with firefighting equipment and machines, that in the training, included check and maintenance for concerned equipments and machines, and firefighting practices and lecture combined training have evaluated as “extremely highly value”.

And, the contents of training information was broadly spread by NRWGO person in charge, through SNS media, the information was widely shared among Iranian forest and rangeland fire concerned persons. As a result, the training has got attention as one of provincial NRWGO initiated training. On the training material, there is no well arranged material for training that gathering Japanese, Australian cases, etc., reference material for training was prepared for consideration, which is a basic data to collect and arrange necessary and adoptive for Iranian actual situation.

Through making of the training material, it can be said that it is a cooperation activities for construction of foundation on forest and rangeland fire preservation measure in Zagros mountain area. And also, as signboard of fire preservation are observed in other overseas countries that the project produced fire preservation sign board which can be accepted in Iran.

2) Capacity strengthen to control illegal use of national land

By the training, knowledge base of forest guards was upgraded, and a usual scene of control action was observed together that quality range of the forest guards was narrowed. Lecturer, a specialist of law, also found new subject which of contents can be reflected to NRWGO’s training in future.

In addition to the above, before after examination was conducted, by which result, the trainees capacity in score was greatly be improved as; average core of the trainee before the training was 13.75 pint (20 point full mark system), while that of after training was 16.77 point.

3) Capacity building of extension officer

To improve Capacity of extension officer in the extended phase, communication skill for other peoples was stressed, because first step of trust building with local villagers start from mutual dialogue.

The training was conducted targeting new employee and employee after having worked and extension officer of NRWGO, and aiming to upgrade their communication ability, asking Iranian experts who is working in Iran as a facilitator and lecturer, in 27, 28 October 2016.

The communication skill training was new experience for all trainees.

And additional training to understand deeply on “Forest School”, which is Iranian version of ,so called, “ forest nursery school”, whose school is aiming to uplift consciousness on environmental issues in Iran and also children’s sensitivity, was conducted. The purpose of the training was to uplift the trainee’s ability

for environment education for targeted dwellers, including children, in 17 February.

The project conducted observation tour for “Forest School” in Mashad city in 10-13 May 2016 to understand practical activities more. Because there were question for NRWGO on concerned activities of education for children in the province, and attempt to connect Children and Natural resources, including utilization of national land, is under stage of being start. Because there are cooperation channel between NRWGO and education concerned organization, including school, through NRWGO’s natural resources week implementation, that the project invited school concerned peoples in the province.

On one hand, NRWGO did pay less attention to attract children interest in NRWGO’s School activities event, for example, making speech on difficult topics.

That the project conducted training aiming to lift up “children oriented communication skill” , getting cooperation with “Institute for the Intellectual Development of Children and Young Adults”, which of function is same as Japanese “children's house”. The topic; “children oriented communication skill” was highly evaluated in NRWGO, and it is said that they decided to create new training code to conduct same kind of training for extension officers who works for peoples participatory operation.

4) Training for staffs in general

Pre-condition to be cleared for implementation of participatory operation is land issues. In order to solve the issues NRWGO judges whether the land is/was used or not used at that time, using aero photograph taken in 1955 or 1967.

Even it was so, troubles between the local villagers have continued in operation field, that right understanding on concerned law was also necessary for the staffs. And that the project conducted training concerned laws to identify and confirm national land boarder for staffs of identify and confirm national land boarder as participants, and could uplift their understanding level.

By-product of the training was that as a result of implementation of the training, lecturers from NRWGO also could get problems to be solved in local area as raw information and they also highly evaluated.

And also, it was positively commented that when a law was revised or regulation/order was officially announced, there were no chance to explain in province, but through this training style;, concerned persons are gathered in a room and hear a lecture, possibility to do same kind of explanation for other province is generated.

And as there include seedlings distribution and planting for peoples participatory operation. The seedlings distribution action may affect directly for livelihood improvement of farmers, because if right seedlings was not distributed, the tree may not make fruit. And if seedlings were not planed rightly, it may die.

That, for NRWGO, NRWGO and collaborative seedling producers, lecture of how to treat seedlings was conducted in 9 November. Because of seedling treatment method at the stage of planting in autumn and in spring season were understood, the project may contributed risk reduction in planting seedling.

And also the project contributed to present possible direction for staff training of staff training, which means there is possibility to use various training methods, the project demonstrate it through implementing out province training. This also may contribute for implementation of peoples participation for operation.

(7) Training material making for the project extension

The project produced Project pamphlet of Persian version, to promote understandings of the project

contents widely. In which, frequent question; “why Japan is conducting cooperation?” from outside also were described.

The composition are; natural condition and Map of Chahalmahal-va-Bakhtiari province, history until open the project, fundamental policy, activities of each field, management structure, PDM, Japan’s Aid, JICA activities in Iran.

The pamphlet was distributed, not only the project concerned persons, but also distributed and used for NRWGO concerned events in and out provinces, which helped many people deepen conscious of the project.

In addition to the work, the project display panels were produced. which of panel demonstrate activities of each field; forest regeneration, grass regeneration, income generation, staffs training. These panels also were used in occasions of NRWGO’s activities presentation in and out provinces.

Other than that, inside glass pot teaching materials, including: tree species seeds sample; wild almond, pistachio, etc., grass species samples; wild slurry, medicinal herb, etc., nomad products; butter, dry yogurt, etc., were produced. These are not so common for general public that, touching real materials, new impression may be generated and deepened understanding for the project.

2.2.2.7 Problems to be solved

(1) CD strategy report

Concerning CD strategy Revision work, drafting work was conducted at initial stage of the extended project phase, and which was approved and finalized by JCC. During the extension period, the project activities were implemented based on the CD strategy policy. The CD strategy was a conceptual plan that was effective to promote the better understanding of NRWGO staff. Hence, it is suggested that each section or department of NARWO can be continued to strengthen the participatory capacity building.

(2) Sustaibnability as NRWGO organaization

1) Forest and Rangeland activities

Since the project works of both forest sector and rangeland sector were not in place of forest section and rangeland section of NRWGO, the works were not handled as usual operations of NRWGO. After the project works were handed over to the sections under the condition above, the project works are not surely and sustainably succeeded. Therefore, it is suggested that activities of both sections will be continued practically and smoothly to Iranian experts and each section.

2) PCC

In order to secure the smooth implementation of the participatory project operation within NRWGO, PCC was established and the activities were initiated from the extended phase. During the extended phase, two subjects were discussed for two to three times in the PCC meetings. The preparation of these meetings were mainly done by the project experts including JICA and NRWGO experts with making meeting materials for sharing information and exchanging opinions. Thus, it is still a subject to be considered that to enforce sustainability independently on the PCC after finishing the extended phase. Measure to enforce the further sustainability of PCC secretariat independently with discussion regarding suggestions by the experts would be recommended.

3) Work as an organization

Though NRWGO is an organization, work procedures are dependent to person in charge in many cases, and this has been bottle-neck of the project activities. As a consequence, experts and C/Ps have consumed their long times and much of man powers for many logistic coordination works, and the project efficiency has been disturbed and works have delayed. Thus, it is suggested that a system to operate activities as an organization with the flexibility to smoothly implement field activities would be considered.

(3) Budget request and confirmation

To secure the project sustainability from the aspect of budget, planning and logistic division persistently conducted request and consultation of budget to the provincial PBO. NRWGO could secure two kinds of budget codes (budget items) concerning the participatory forest and rangeland management project from the budget of the province. That the budget for the participatory forest and rangeland management project, by which NRWGO, independently, implement the activities was confirmed.

However, according to Iranian budget system, there was un-stability that the implementation budget was decreased and delay on budget allocation was continuously happened. Therefore, it is suggested that the measure will be considered to keep the connection fund to manage the implementation plan.

(4) Staff training for Capacity building

During the extended phase, staff trainings were implemented including the capacity building of local staff and which were effective. Since closely connected practical problems were wide in the real field and target field staff could not enough cover by the project. Concrete issues and objectives to be expected for the future activities are given as follows;

Fire fighting:

Vegetation recovery means the increase of flammable materials, and the risk of forest fire also will increase. A fire burn and lose planted trees and herbs that it is indispensable to collaborate with villagers to prevent from forest fire and fire fighting activities. During the extended phase, lecture on the prevention of forest fire and practice of fire fighting activities were conducted for the staff, but it is necessary that more practical training such as; fire fighting works in water shortage area in semi-dry area, safety conscious extinction method, fire fighting collaboration with other organization and villagers, will be conducted and it is expected that NRWGO will conduct above training repeatedly to NRWGO.

Nursing and breeding:

There are no supply system of sound seedlings which will be necessary to recover vegetations, and nursing and breeding knowledge and experiences have not been accumulated in NRWGO. This means that situation of NRWGO is that they do not have measures to accumulate concerned such technologies including seedlings supply plan, nursing method by species, anti-disease and insect damage, propagation techniques, etc. Hence, it is suggested that an opportunity of practical training is prepared for the future.

Communication ability:

NRWGO, as government organization opening for public, have more opportunities to speech in schools concerned, and there are needs to respond for questions from local villagers. On the basis of taking the environment into account, NRWGO shall acknowledge the importance of communication skill. Thus, it is suggested that opportunity of training about the manner of speaking would be increased including OJT.

2.2.3 Activities of the output2

2.2.3.1 Achieved results of the 1st year

(1) Identify target villages for participatory forest & rangeland management, and introduction of alternative income source.

1) Target village definition

10 villages as candidate for the target village has selected and contracted survey Shahrekord University conducted Socio-economic survey by house hold questionnaire method (Work B) to have general information of Bazoft area.

Then, the project selected 5 villages for pilot operation, employing UNDP project experienced local expert and applying PRA method, conducted the village community survey (Work A)

① 10 of candidate villages selection

Based on collected full range geological map of Bazoft area, dwellers population statistics by villages and applying following criteria, preliminary be selected 10 villages by NRWGO, asking for JCC and reflecting its view, survey objective villages was selected.

Good access condition

Security condition secured

No conflict among village and government offices

Fundamental government services are provided

Villager's dependency for forest and rangeland is high

Women's participation for the village activities is secured

The villagers in the village understand the project purpose and have will to participate the project activities

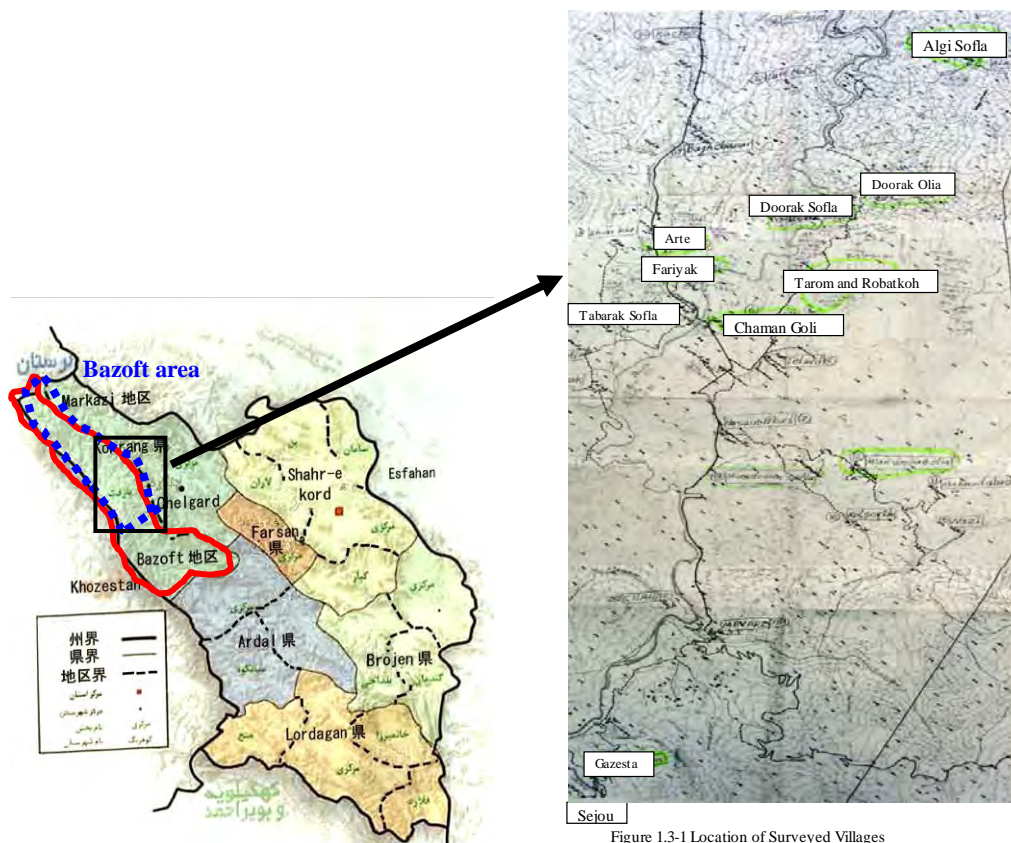


Figure 2-1 Location map of selected 10 villages and village name

② At first survey contents as shown in the table below were planned for 10 villages by contract base, but an important view point was raised that to escape from negative effect for NRWGO, increase in less-reliance for NRWGO, such type of survey as PRA, in village and villager participated survey type, should be conducted after decision making that selected villages are decided, using equitable criteria, as pilot villages. And Work B was conducted and using which of surveyed data, 5 villages has been selected, and PRA (Participatory Rural Appraisal) survey and group interview had conducted.

Table 2-15 The survey contents and method

Category	Method of survey		Targeted number of villages (real number of survey)	Informant	Contents of survey	Surveyor
Work A-1	Group interview	Interview to intelligent people	10(5)	Intelligent villager, collaborator	Village history, outline of present village condition	NRWGO or PRA moderator
Work A-2	PRA survey	Gathering of knowledge and view of villagers by moderator applying using participatory tool	10(5)	All of villagers	Problems to be solved in the village	PRA moderator
Work B	House hold survey	Individual interview by using questionnaire	10 (10)	Extracted 30 household	Family, land, income and expenditure , future hope	Contract

5 villages selection was conducted based on, using numeric figure which seems objectively correct and equitable criteria for selection, that available “House hold survey data” was used. For making score table, applicable indicators from the survey of 1) High-Low on forest productivities 2) High-Low on rangeland productivities 3) Much-Less on income source items 4) Much-Less on income source items 5) Much-Less acknowledgement on forest situation change 6) Much-Less acknowledgement on rangeland situation change 7) Much-Less experiences on floods 8) Much-Less expectation on livelihood improvement And asked to be selected by NRWGO with additional factors which were village location (right, left, southern side of Bazoft river) and to be settled villages. NRWGO selected villages were, Gazestan, Tabarak Sofla, Alte, Durak Sofla and Tarom & Robotkuh villages within among 10 villages above.

Initial explanation meeting for selected 5 village chief (Dehyar) and Islamic council member (Shora) to conducted detailed survey, including PRA survey, some issues shown table below were appeared and pilot villages were decided as; Gazestan, Tabarak Sofla, Tarom & Robotkuh, Durak Sofla and Mazerashte (former Durak Olia) villages. Surveyed results by PRA for 5 villages are described in following Community Development report.

Table2-16 Issues appeared after noticed for selected villages on the village survey

Villages	Issues appeared	Solution
Arte	There was a Shora which of covering area include 4 sub-villages	Many troubles were happening among 4 sub-villagers were cleared and judged as in-appropriate for pilot village, which of information was conveyed the Shora through NRWGO
Durak Sofla	Durak Olia and Durak Sofla formed a Shora area that un-expected woman’s representative of Durak Olia came to join in the meeting	It is difficult to do 2 villages activities in a shora area that Durak Olia village (now called as Mazerashte village) separated from Durak Sofla shora and decided as independent pilot village

Tarom & Robotkoh	The village is in reality include 2 sub-village. But Robotkoh village is an nomad village that government marged the 2 sub-village into a village	Village population in the 2 sub-villages are not so many and are villages each others are relatives. Village condition survey workshop was planned to hold during next summer season when villagers were migrate to there.
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2) Conduction of the field surveys

Potential on community development surveys were conducted, initially 10 villages were selected for socio-economic survey, based on the survey outputs, 5 villages which were selected as implementation of pilot project for applying PRA method survey. An overview for the area and a summary for each of the target villages are as given herein below.

① Agricultural practices in the area

Weeding is done after onset of the first rain (November-December), followed by tilling, fertilization (manure application) and seeding after the second rain. About 2/3 of the tillage works are done by using draft animals such as oxen and donkeys, and 1/3 is performed by tractors. Seeding and fertilizer application are done manually. They apply fertilizer in March and start harvesting the barley in May followed by wheat harvesting in June and July. After wheat harvest, vegetables such as squash, eggplant, bean, broad beans, okra, tomatoes, and cucumber. Fodder crops such as clover and alfalfa are also planted for feeding livestock. However crops are produced mainly for self-consumption, but in some case they will sell the surplus to gain cash for daily expenditures.

② Livestock Situation

No large-scale livestock industry exist in the area. People usually raise/rare the livestock at home, with an average of about 10 head per household. Major animals are goat, sheep, with at least one dairy cow per household. Animals grazing is usually done from April to November before snow fall. While in winter they are fed at home by dried fodder. Once a year people take the livestock to nearby cities for sale.

③ Other activities in the villages

Some women make Choogha (a traditional dress), carpet, and wool string, and sell them in nearby towns. As a traditional manner, women acquire the skills (Choogha making and others) from each other without going to any technical school and manual sewing machine is taken as trousseau. Not only traditional cloths, but also sewing is active nowadays.

When the forest was rich, men used to do some carpentry works and making woody commodities, but no it is almost abandoned.

④ Forest and Rangeland Utilization

Forests are mainly used as firewood and grazing area. For local people, oak forest has high utility value for collecting acorns and selling them. Before forest and rangeland area was used hunting area, but nowadays degradation of forest and rangeland is worse, there are few wild animals. Moreover, useful plants such as medicinal plants are very few for severe harvesting, correspondence is desired.

⑤ Situation of Target Villages

Summarized results of interview in each village are as below,

a- Gazestan Village

Gazestan village is located in the southern part of Bazoft area, and this location is the most south part between these selected 5 villages. And this village is far from others 4 selected villages. The road from the main road to this village is paving now(as of 2010).

There are 128 households and 713 persons in Gazestan village. This village has 250 years history. In this village, there are 3 families, Asadi, Barani and Behzadi. The unities of each three families have a big authority and the possessions of lands are divided according to these families. Water and electricity provide with all. Primary school, mosque and health center are in the village. The scale of this village is in bigger class between 5 selected villages.

Regarding land utilization, the percentage of forest is high and there are still remained relatively big oak trees. Hadi Plan is implemented in this village, but there is the problem of shortage of residential land at the bottom of increasing population. There are 130-140 ha of harvesting area. At the moment these harvesting area are non-irrigated, but in some area of these lands will be able to use irrigation pipe, according to the villagers (as of 2010). There are 6 ha of orchard area. Peach, walnut, almond and apples are planted in these orchards.

The villagers themselves employ one watchman for protection of forests with their own budget. The watchman is paid by villagers 10,000,000 rial for the period from April to November as his salary.

b- Durak Sofla Village

Durak Sofla Village is located in the western part of Bazoft area. To reach this village, it takes 15 minutes taking the branch road from the main road, on the branch road is not so bad except one part which is muddy when it is rain(as of 2010).

There are 28-42 households, it changes depending on nomads, and population is 190 persons, male 101 and female 89. This village is established 100 years ago with Takhteh Qapoo Project which settled nomad people to this area. The unity of this village is good because, the leaders of this village work well for the villagers, therefore if something will happen, the leader or Shora can solve them. Water and electricity provide with all. There is a primary school. A health center are in Mazerashte Village, and the health center takes charge of two villages, Durak Sofla and Mazerashte, the villagers of Durak Sofla have to go as far as Mazerashte Village, so it is inconvenient. Literacy movement is active.

There are 3,000ha of forest and 15ha of rangeland. All orchards are walnuts. In the past time, there were many animals in the forests, and there are many species plants, owing to forests and rangelands degradation and over hunting by villagers, these animals and plants are scarce. Almost of the farming land are non-irrigated, but some area near the river can be able to irrigate. Women make traditional clothes "Chooqa" and carpets, and they sold them to other villages.

Multi-purpose cooperative is established by NRWGO is existed, but because of bad control and lack of supervision, nowadays they don't any special activities by themselves. The relief Committee has a loan for the villagers to increase their incomes. According the villagers, most of the villagers are using this loan.

c-Mazerashte village

Mazerashte Village locates in the western part of Bazoft area, upside left of Bazoft river bank and further north mountainous side of neighboring Durak sofla.

There are 40 households and 220 persons. When the nomads come, the population is 400 persons. 5

years ago, the people who had been lived in Durak Olia moved here, Mazerashte, because of Durak Olia have had floods. Durak Sofla and Mazerashte, which village make up the people who had came from Durak Olia, were one village, therefore these two villages, Mazerashte and Durak Olia, have only one Shora. Water and electricity provide with all, however the bad management of water source, drinking water is contaminated. There are primary school and health center. Mosque have constructed in these days(as of 2010).

The half of village area is forest. The rangeland is managed by Kiarasi family. In the past days, more than half of the farming lands were irrigated. Because of the droughts, water source have been decreased and these farming lands are non-irrigated land. The orchard lands are far from center of the village, there produce walnuts, grapes and pomegranates. About only 10% of farmers, compared to the old days, breed livestock, the condition for breeding of livestock is difficult. Livestock animals are sold once a year in May in the market of Shahrekord or Khomeinshahr or to brokers.

In 2000, NRWGO had implemented the project including almonds plantation, and established multi-purpose cooperative, but monitoring and supervision of the project did not manage well, the project was not successful. After that the villagers themselves provide their budget for watchman in that area, but after a while, they gave up. However from 2009, they restarted to employ watchman for management of protection area, nowadays there are outstanding results in the protection area.

d-Tarom village

Tarom village locates in the western part of Bazoft area, and left bank of Bazoft river. Tarom village and Robotkoh village are small villages, so they counted one village in the administrative system. Robotkoh village is made up by nomad people, when the project team arrived at for project activities, the nomads had already moved to the south, Khuzestan Province.

There are 30 households and population is 120 persons. By the governmental settled plan, 100 years ago nomads started to establish the village. All of villagers are Behdarvand clan, so the role of Shora is important for them. Water and electricity provides with all, but bad management of water source, drinking water is contaminated. There are primary school and health center(as of 2010).

Forest area covers 2/3 of village area. There are 60 ha of farming land, they cultivate not only wheat and barley, but also vegetables. There are more than 10 ha of orchard of walnuts, almonds and grapes. In the orchard lands are irrigated from upstream, therefore the quality of fruits of this village is better than other villages, these fruits are sold by villagers. In the farming lands, the villagers establish buildings illegally. Women produce traditional "Chooqa" clothes and carpets.

Before the revolution, there was credit box for rice supply, and after the revolution there was credit box made by rural cooperative, they have been active until 3-4 year ago. Multi-purpose cooperative which was established by NRWGO is not active now. Youth who has special techniques have gone to big cities for work.

In the past days, wild goats, seeps, foxes, tigers, wild pigs, vulture, partridge and many kinds of wild animals were there. In the mountain area, there were many kinds of plants, for example, celery, leek, fennel and etc. But these 3 past decades, the forest and rangeland degradation caused that these all species would be rare in around these area.

e-Tabarak Sofla village

Tabarak Sofla village is located in the eastern part of Bazoft area and right bank of Bazoft river. It is

relatively near the center of Bazoft area, Chamangoli and ChamGhale. The road to this village have paved in 2010.

The households numbers are 100 and population are 900. This village is bigger one between these selected 5 villages. The settlement had begun 180 years ago. This village is made up by Babadi clan, under the Babadi clan there are 3 families, Hasanvand family, Khodaverdi family and Asadi family. The leader of this village is cooperative to NRWGO and activities in the village are active. Water and electricity provide with all. Though water pipe has water meter, water fee is not collected yet. Primary school is in the village, secondary and high school are in Chan Gale. Otherwise the children of this village go to ChamGale from the secondary school, relatively more near village between 5 selected villages. There are health center, mosque, cooperative shop and broadcasting station. The infrastructure of this village is relatively sufficient.

80% of village area is forest land. The rangeland locates in the south part of village. The orchard land is cultivated walnuts, almonds, grapes and peaches. The farming lands are divided 6 parts. In irrigated and non-irrigated both of farming lands are cultivated wheat, barley and gumbo. Clover and alfalfa cultivate only irrigated land. Tomato, cucumber and other vegetables also cultivate. Before the rice cultivated in this village, but because of luck of water the villagers do not cultivate rice already. Almost all of the agricultural production is for consumption for them-selves, but the villagers want to sell the surplus production.

They have multi-purpose cooperative by their own efforts, and they are interested in cultivation of medicinal plants under the forests.

⑥ Overview of condition of forest and rangeland in the target villages

This survey was conducted on the present condition of the forest and rangeland in the target villages for the project to examine the model protected area establishment of the target villages for the project in the Bazoft area.

For the purpose of grasping the present condition of forest and rangeland, with village residents who have in-depth knowledge of the field as a guide, the forest and rangeland in the village was surveyed. In addition, the standard plot was established in the forest and rangeland which represents the village, and the survey was conducted on site condition, regeneration condition, and stand situation. Outline of study is below;

a- Distribution of forest

The standard plot survey was conducted in the area at altitude ranging from 1500 to 2300 meters. The relationship between altitude and diameter at breast height (DBH) was analyzed. Regardless of difference of altitude, trees with a variety of sizes are distributed in this area except for the area in the vicinity of forest limit.

b- Stand structure

There are significant differences in the stand density, ranging from 25 to 4,600 trees per hectare, depending on the target village. The forest with the stand density of 25 trees per hectare is scattered in the field of Gazestan Village. On the other hand, the forest with the stand density of 4,600 trees per hectare is regenerated by sprout in Tabarak Sofla Village. The average height of tree in the standard plots ranges from 3 to 12 meters. The average height is approximately six meters.

c- Condition of natural regeneration

In the 1st year survey, regenerated seedlings could not be found in each village. The following causes can be thought of as reasons: grazing and farming even with enough supply of seeds; less mother trees and insufficient supply of seeds; and damages caused by small animals and insects. Prevention of intrusion by cattle into forest and rangeland can be thought to increase the possibility of natural regeneration.

d- Impact of grazing

Although NRWGO strongly forbids tree cutting in the forest, in reality, tree cutting has been implemented for firewood and charcoal, and fodder. In addition, although the grazing within the forest is being implemented with permission, an increase in the number of cattle has resulted in overgrazing, which causes difficulties in natural regeneration. The collection of acorns is effectively used as income source for women and girls in the village. The collection of acorns is believed to be effective for protection of mother trees unless acorns are over-collected by them.

e- Possibility of the protected area setting

It was thought that there were no problems for some candidates of the pilot plots in the targeted village. In establishing of the pilot plots, where there are a variety of opinions from residents, it is necessary to have clarification of the land ownership within the village as well as discussion on the scale of the pilot plots. From the 1st year survey, it seemed that establishing of small-scale pilot plots was preferable in the consideration of management of the village and utilization of grazing.

(2) Identify and organize residents organization which is able to work with government organizations in target villages, Selection and Training of the CFs, Prepare training plan for CF, Implement the trainings for CFs

The CFs were selected to facilitate communication and coordinate works between the Project and the villagers. They were selected based on capabilities such as coordination ability, office work ability, a cooperative, understandings for main purpose of participatory and trusted by villagers. During the PRA survey, villages also mentioned name of some eligible persons to appoint as CFs. In general each village has an Islamic Shora (comprising of 3-5) person, and more than certain scale village, village chief (Dehyar) is selected. These persons will be the entry point to the village when government start projects. In the first year, training on formulation of Village Action Plan (VAP) for next year was implemented.

2.2.3.2 Achieved results of the 2nd year

(1) Identify target villages for participatory forest & rangeland management, and introduction of alternative income source.

Since during the first year PRA implementation people of Robatkoh, who are nomad in Khuzestan for winter season, the PRA did not cover them. Therefore an additional PRA survey was conducted focusing on situation of people of this village.

Robatkoh village

It is located in the western part of Bazoft district, left bank of Bazot river, at upper part of Taron village. Totally 60-70 households belong to this village, of which 30 are purely nomad, with season movement to neighboring province of Khuzestan. They come to Bazoft from around May to October to

graze their livestock in a large rangeland called Sargaleh living nomadic tents.. During November to April they are in Khuzestan Some people also work and study in Khuzestan province. For last 500 years, the Mohamadi and Kazemi families are living in this location. This village is about 2km away from paved road, and has no any significant infrastructure. They use spring water flowing in surrounding lands, and they have no electricity nor school available. With time they have established orchards of walnut, pomegranate, and other fruits, and these products are sold to middleman and partly consumed in household. In the past nature of this area was very rich and some valuable vegetation such as wild garlic (*Allium* spp.; Musir) and wild celery (*Kelussia odoratissima*) existed, but now it faces degradation of natural resources, so people are trying the control number of their livestock to cope with this worsening situation. Robatkoh and other villages, the villager's academic background is higher than other villages and their clothes which villagers are wearing are better. During winter season, only 2 families are left in Bazoft area, but 1 of them stays in Telurd.

(2) Identify and organize residents organization which is able to work with government organizations in target villages, Selection and Training of the CFs, Prepare training plan for CF, Implement, Monitor, evaluate and obtain feedback of the trainings for CFs

General condition of Bazoft area which is necessary to identify and organize resident organization is as follows.

Bazoft area has been a home land of Bakhtiari tribe for a long time, in which stable dweller and nomad have kept symbiotic relation. The tribal people have shared common understanding that they are the successor of old Persian tradition and by which they have not welcomed new custom flow in. They still keeping close tie among families. Under the tradition, new administrative organization, Shora (Islamic council) have selected by families and their village decision support structure have had complicated. And also by a governmental regulation, in case if village size has got large, Dehyar, as official village chief, shall be selected among the Shora.

Under these conditions, the project allocated CFs at the initial stage as correspondent, and it is supposed that persons in ordinary interested party and having traditional power might not welcome the CFs. The participants also would act trying to judge above influential person's feelings.

Another factor would be a character of the dwellers. They express their views freely and act also uncontrolled that coordinator or facilitator may faces difficulty to make decision. The CFs is the persons who were respected by villagers and acceptable person by most of villagers, but because of the new role, his activity may not be on rail. And, in some village, because of the villagers have different image and expectation on the project, CFs of the village could not have consensus among villagers.

Women CFs status are more unstable. Even if they could coordinate and got consensus among women, in some case she needs permission from her husband and in some case they have to respect view of Shora. Special attention shall be given to the geological barrier of Bazoft area. Because of the surrounding area is mountainous and access condition for major urban area, for example it takes 3 and half hours far from Shahrekord. And also geologically mountain rich area, big differences in elevation, and continuous harvest of oak forest, though the action is illegal, steep sloped land development are difficult. Residential distribution pattern is generally dispersal style which is inconvenient for activities which needs gathering form such as meeting and training.

Jealousy might be another factor. Lecturers of sewing felt that excellent trainee shall not be selected and not praised, because once special treatment for someone have felt by other trainee, there might have

possibility of other trainee tend to untruthful for the training in total. In case of CFs, as they are officially selected personnel, there may not serious issues happening, but continuous special treatment might generate some negative effect.

Feeling above mentioned factors in mind, in the 2nd year, CFs allocation have been designed as sector CFs and sector expert have kept close communication with CF, which means OJT have been conducted. It might be to say that the project should, watch village environment, consider and conduct how and what kind of input for CFs are appropriate. In conclusion, it may take time further until the CFs would have been raised to be imagined correspondents or facilitators.

Taking into consideration of socio-economic and cultural conditions of such the area, as for the 2nd year, CF is selected by field and each of the expert kept mutual communication closely and conducted CF training focusing on establishment of relationship of trust between residents and project applying OJT method but not lecture. Through this activity CF could understand the proceeding of the project and its idea progressively, thereby became capable to conduct the duties smoothly.

2.2.3.3 Achieved results of the third year

(1) Prepare training plan for Community Facilitator (CF) who will assist Village Action Plan (VAP)

As for CF training plan, it was carried out by OJT base at each field at the appropriate time.

Main contents of OJT are how to inform, disseminate and compile. As for the specific field, guard training, check dam training, fire break establishment training, inspection training for village activities for forest and rangeland management, and inspection training for advanced management of orchard garden for rural development. In addition, as for preparation of general workshop, CF prepared meeting papers in order to clearly understand the activity and responsibility of the representative.

(2) Implement the trainings for CFs.

1) Forest guard training

To the forest guard assigned in the memorandum of forest guard, the following training was conducted. The binocular was handed over to the forest guard through CF.

①Lecture

The role of forest guard and report was lectured by the NRWGO staff. Especially the importance of reporting system was strengthened to the participants.

②Fire break preparation

The importance of fire break was pointed out by NRWGO staff before. Prior to site training, the fire break was constructed at protection area in Tabarak Sofla village according to the advice from the NRWGO technical members.

③Site training

The function and preparation method of fire break was explained and fire distinguisher was demonstrated by the NRWGO staff.

2) Check dam training

①Check dam workshop

The workshop was held for the villagers in Mazerashte and Durak Sofla village. The following contents were conducted.

- Explanation of importance of watershed management in this area

- Explanation of function and procedure of construction
- Needs for construction check dam by the villagers

② Construction procedure

The check dam construction was conducted in Tabarak Sofla village by supervisor and villagers. The procedure of check dam construction is as follows.

- Survey of candidate site (5 to 6 site)
- Selection of construction site from the candidate (from the site, material, extension viewpoint, etc.)
- Implementation of construction (procurement of masonry, labor and stone, measurement)
- Confirmation of construction result

3) Village tour for community facilitator (CF)

CF of each village was brought together in Bazoft Guesthouse, and the protection area of Tabarak Sofla village and Tarom village, and the check dam of Tabrak Sofla village was inspected. The opinion of CF is that seeing of activity of those villages is good and administration officials should be seen on project activities for understanding. Moreover the result of the questionnaire to each CF is as follows. CF intends to participate in the village tour again. This tour became a good experience and was able to study various things. Participation of CF in this tour serves village action plan as a motivation of extension

4) Study visit to developed orchard area

Village people were taken to fruit growing areas for increasing their knowledge on orchard management, the site visit training was held. Totally 23 persons participated comprising CFs, staff of NRWGO and staff of JAO.

In the training, information on pest and disease control, irrigation, fertilization, details of establishment orchard, management and variety of peach were provided by private orchard site; and system of management, water requirement quantity for irrigation, drop irrigation system, and advantage of almond cultivation were provided by cooperative orchard site; trainees could learn from them.

(3) Monitor, evaluate and obtain feedback of the trainings by CF training participants.

In each training, monitoring, evaluation and feedback after the trainings were implemented and the results were reflected in next trainings.

2.2.3.4 Achieved results of the 4th year activity

(1) Prepare training plan for CF who will assist VAP

It was found CF Training by OJT base was effective that this year's Training such kind of activities as; liaison, information transfer and summarize views, also, were continued as OJT base. And documentation and presentation abilities have developed through the WS.

When there are specific issues, CF training on the subject have conducted, such training as; forest guards training and village activities exchange training and site visit to Shiraz by Forest and Rangeland group and site visit and exchange opinions to Mazandaran project implemented by NRWGO and World Bank jointly.

(2) Implement the trainings for CFs.

1) Forest guard training

Forest guards were assembled in Bazoft guesthouse and received some explanation about a. law and regulation b. writing a dairy record c. report writing of illegal persons such as illegal cutting and overgrazing from the counterpart.

2) Field visit for community facilitator (CF)

CF visited to fig cultivation area (rainfed) in Estahban area of Fars province. The fig has been cultivated by technical instruction of JAO in this area for a long time. NRWGO borrowed the national land to villagers (cooperative) for fig cultivation. Besides in this field visit CF visited the green park constructed and managed by local people and project engaged in women income generation activity by cooperative.

3) Mazandaran site visit

In order to observe the participatory natural resources management project activities which have been conducted by NRWGO and World Bank and to exchange views among woman's group, and total 12 members, including CF of orchard, CF of sewing ladies and part of its relatives, have joined and Community Development expert and Iranian Forest and rangeland expert have joined. Form Gazestan, no participant was joined because there were problems in village.

The visited site condition were different from that of Bazoft in the climate and vegetation, though it were so, This training can be said as meaningful, because each participants have got learned in each aspect, CF could learn within communications with local villagers on women's activities and many of them understood the difference of project management. After coming back from outside, they transferred the results in villages.

(3) Monitor, evaluate and obtain feedback of the trainings by CF training participants.

In the site visit training, opportunities of presentation in villages by the participants who went to the site visit had been prepared and gave the information and feedbacks to other villagers. In other trainings also, monitoring, evaluation and feedback after the trainings were implemented and the results were reflected in next trainings.

2.2.3.5 Achieved results of the 5th year activity

(1) Prepare training plan for CF who will assist VAP

Ordinary activities such as liaison, communication and gathering were implemented in OJT in each field. The capacity had been developed through making documents for workshop in village and presentation.

Necessary training in expertize fields had been planned in each field.

Fig cultivation training, forest guards training, orchard activities over all workshop and VAP making training were implemented.

(2) Implement the trainings for CFs.

1) Fig planting training

CF training was conducted inviting the lecturer of fig from Fars province 14th and 15th September. It is possible to introduce variety of fig (rainfed) to Bazoft area for forest conservation and utilization. About 20 persons from Forest and rangeland CF , community development CF and field staff of NRWGO gathered in this training. Lecturer has many knowledge based on field experience and explained the possibility and advised about planting technique. The first day of training was lecture and second day was field

observation for possibility of planting fig in the village. It was high evaluation because contents of training is practical and useful for the participants. It is necessary for NRWGO to support activity that participants can cultivate in small scale.

2) Forest guard training

The 3rd forest guard training was held 22th September. The forest guards gathered and reviewed their activities to share the problem of the forest guard activity in this training. And this result will be put for next activity in future.

Mr. Karimzadeh as facilitator conducted training by using PCM method which he learned in staff training conducted by JICA project. Problem analysis by PCM method was conducted. Firstly by using the cards participants wrote problem of forest guard. Secondly the problem was categorized and the priority put among those problems. Finally the cause of problems was analyzed by using problem tree. For smooth implementation of training, participants is divided into two groups. Group A :core problem was “villagers did not cooperated with forest guard” and the cause of problem was “villagers did not know nature importance”, ”villagers think own benefit only” and “merit of model protection area was not clear at the view point of economy”. Group B: core problem was “forest guard did not take action against the offender” and the cause of problem was “lock of number of forest guard”, ”offence report was not received by court” and “a few cooperation with other official concerns”. Though there was no time to discuss the countermeasure of core problem, the problem sharing among participants have been done hearing the other guard opinions.

3) Orchard activities over all workshop

The workshop related to orchard on review on implemented activities for 5 years and plans from now, had been held with total 35 persons, including CFs, concerned persons who are interested in orchards and staff of JAO. Opinions on activities for future could be exchanged. The project issued certificates which were certified on daily management of orchards and participation to trainings which had been organized by JICA project with expectation of increasing their motivation on management for future.

4) VAP making training

The training “from PRA to VAP making” had been held by Mr. Rezazadeh, C/P of Community Development, as a lecturer A lecture from implementation of PRA workshop to VAP making by villagers as main body and practices of VAP making were implemented. After that, the expert of community development activities support who employed by the project visited for guidance to revise VAPs which were made by CFs. APs on such as seedling production, forest species planting, wild celery cultivation and check dam construction were submitted.

(3) Monitor, evaluate and obtain feedback of the trainings by CF training participants.

In each training, monitoring, evaluation and feedback after the trainings were implemented and the results were reflected in next trainings.

2.2.3.6 Achieved results of the extended phase

(1) Identify and organize residents organization which is able to work with government organizations in target villages.

The project, accepting the recommendation concerning to ensure sustainability by the final evaluation team, surveyed and confirmed on to specify organization of villagers to which NRWGO can directly contact and payable conditions for the contracted operations under NRWGO system. As a result of the survey, it was confirmed that there is a condition on possible contract body by different contract budget scales, and that a person also can make contract directly with NRWGO if contract work is a small scale.

After that, the project of highland rangeland expert group has applied the condition; small scale contract work contract with a person, as a case of practice, for permanent plot setting work in the highland rangeland. The work contract was a direct contract with a person. And the project has made guidance for the contractor to self-management capacity for upgrade practical implementation capacity of villagers group based on and as NRWGO official view, the office are promoting to establish cooperatives, and promoting activities with the organization, and it is so said that , for the purpose, fund management are on operation.

On women's micro-credit groups of the project are seemed to be identified as non-legal voluntary organization, if the groups fulfilled such conditions as; their own rules were provided, they have their own organizational bank account, fund accumulation activities are on rail, and their activities are actively be conducted.

(2) Identify and support of appropriate fundraising methods for target area.

The project, accepting the recommendation concerning to ensure sustainability by the final evaluation team , the project surveyed, especially, on how to get fund, continuously, to continue village development activities. Activities concerning Fruit and beekeeping, these activities are under cover of Agriculture sector that interview surveys for concerned sector of JAO were conducted. The answers of theses sector were; on subsidy, there are nearly no support other than provision of loan for drip irrigation.

On possibility of loan from commercial bank, only Branch station of Agricultural Bank is in Bazoft, and it was understood that to get loan from the station is impossible at present. On Resalat Bank, the staffs told that they emphasize and putting vigorous effort to achieve social contribution oriented activities and also expressed to develop Gramin Bank like operation, that the project held an information exchange meeting.

There were such explanations that; dealing through mobile phone is available even if there are no branch station, bank staff visit to village also available, and, on a critical problem on guarantee, in a condition living in disadvantaged area, etc., condition of guarantee can be mitigatable /preferential treatment. The project C/P is following the matter, but there is no news of obtain the loan.

On the other hand, within the pilot villages, the microcredit activity of saving money by them-selves have been on tails, and 2 of credit boxes were on operation, which of members are around 60 members/ each box, and 5,000,000rial loan have been conducted for all members, and 10,000,000rial base loan have started, in August 2016. The fund from the loan have been used for such activities as; poultry farming (parent bird), bee keeping (beehive box, sugar for food), dress making (clothes), home garden (seeds, hose, etc.). It is allowed, if necessary, to use for ceremonial occasions for the coming of age, marriage, funeral and ancestral worship, and expenditure for hospital, etc., have allowed.

Judging from the situation above, and with a condition of existence of microcredit manager, it was clearly be understood that appropriate funding source for the area might be microcredit system

(3) Prepare training plan for CF who will assist VAP

Based on the results of implementation of CF trainings from 1st year to 5th year, considering the necessity in the fields and others issues to be considered, CF training plan was prepared for the extended phase.

Table 2-17 Plan on CF training for JICA project in extended phase

	Issue	Target persons/ Target capacity	Implementation	Lecturer/Place	Schedule
1	2 nd Liaison Coordination meeting	All CFs/ Liaison and coordination capacity and continuation capacity	1- introduction of ICHHTO and their lecturer 2- Explanation on CF training for this year 3- pre announcement of site visit to medicinal plant cultivation in Kohgiruye-Boyer Ahmad province	Iranian and Japanese project experts, other required teacher/ NRWGO Bazoft, ChamGhale JAO	April, 2016, Ordibe hesht 1395
2	Site visit to medicinal plant cultivation in Kohgiruye-Boyer Ahmad province	All CFs/ Renovation of ideas, knowledge of medicinal plant, marketing and selling methods	Site visit to medicinal plant cultivation in Kohgiluye- Boyer Ahmad.	Implementers of Kohgiluye- Boyer Ahmad province, NRWGO/ Kohgiruye- Boyer Ahmad province	Middle of May
3	Report on site visit of medicinal plants	CFs who went to site visit/ Capacity on liaison, presentation, implementation	After the coming back from Yasuji, the results of the site visit will be presented by CFs to the villagers who did not go to Yasuji. Using photos from site visit and preset by CFs.	CF who go site visit/ Each village	End of May (after the site visit)
4	Explanation on Article 3 related to forest and rangeland conservation and utilization	All CFs/ Understanding leasing of national land (article 3)	Explain on situation of national land leasing by land protection affairs, explain about procedure, condition and in charge of this work by facilitator,	Facilitator, staff of land protection affairs/ NRWGO Bazoft, or ChamGhale JAO	August - September
5	Discussion on illegal invasion (as 3 rd Liaison Coordination meeting)	Related CFs, Guardsman/ Understanding circumstances and liaison capacity, understanding to others	Presentation of situation of each protection area including invasion problems, rehabilitation conditions and others). Explanation of rules of protection by NRWGO and situation of Bazoft office case, exchange opinions.	In charge of NRWGO, Koohrang office/ NRWGO Bazoft, ChamGhale JAO	September
6	Experience exchange meeting (as 4 th Liaison Coordination meeting)	All CFs, other villagers who have been active for activities/ Capacity on reporting what already done, communication capacity	Site visit to the best activity in each village and give explanation by CF. Taking lunch and exchange opinions in field. 8:00 Telurd 8:30 Gazestan 10:00 Mazerashte 11:00 Durak Sofla 12:00 Taron 13:00 Tabarak Sofla Lunch in field and exchange opinions 15:30 finish	All CFs/ Each village	October

CF: Community Facilitator

Facilitator: facilitator of NRWGO and MENARID staff

(4) Implement the trainings for CFs.

In implementation in field level, reconsideration such as schedule arrangement among concerned organizations and persons, adjustment between actual situation and contents, before implementation were

often happened. Deciding the date for implementation had taken times, the training did not carrying out according to the plan, all the trainings could be implemented because the project tried the best to manage efficiently. The implementation record is below;

Table 2-18 Record of CF training implemented

	Contents	Target persons/ Target capacity	Implementation	Lecturer/Place	Date
1	1st Liaison Coordination meeting	All CFs/ Liaison and coordination capacity and continuation capacity	Explanation on Work Plan (project team), Explanation on new policy (introduction of commercial tree species) (NRWGO), Introduction of advanced excellent case (NRWGO of Kohgiluyeh-va-Buyeh-Ahmad), Explanation on low interest loan by Resalat Bank (Resalat Bank) Question& Answer (46 participants)	Iranian and Japanese project experts, NRWGO from other province, Resalat Bank/, ChamGhale JAO	November 2015
2	Production marketing	Community development CF, interested villagers, officers/ how to sell productions	Instruction of orchard management and selling, small scale selling for promoting sales of Saffron, record methods of sales quantities/unit price/sales amount, examination of package for selling, and others (22participants)	Iranian and Japanese experts/ Mosque in Tabarak Sofla	November 2015
3	2nd Liaison Coordination meeting	Forest & rangeland and Community development CF/ Liaison and coordination capacity and continuation capacity	After ICHTO site visit, officers proposed and commented about potential on tourism and handy craft development in Bazoft, cooperation for future was discussed.	Iranian and Japanese experts, ICHHTO officers/ Gazestan, Dehnash, NRWGO	June 2016
4	Exchange opinions on illegal invasion	Related CFs, Guardsman/ Understanding circumstances and liaison capacity	Report on issues to be solved about illegal invasion to the protected area (villagers), Explanation on regulation for protection by NRWGO and actual condition of control in Bazoft office (NRWGO), Discussion	NRWGO staffs, forest guards unit, Bazoft office/ Mazerashte, Durak Sofla	August 2016
5	Explanation on Article 3 of the law of forest and rangeland utilization and conservation	CFs (JICA, MENARID)/ Understanding leasing of national land (article 3)	The article3 lecture was carried out as a pre-lecture of site visit for medicinal plants cultivation. Opening remark (Director General), history of natural land, how to lease lands under article3 (Deputy for land affairs), discussion * joint operation by NRWGO, training office, MENARID and land affairs department	NRWGO land affairs deputy/ JAO in ChamGhale	September 2016
6	Site visit of medicinal plant cultivation	CFs (JICA, PPP, MENARID)/ Renovation of ideas, knowledge of medicinal plant, marketing and selling methods	Site visit to ZARDEBAND, medicinal plants processing factory in Yasuj Site visit to Anghoze, Barije cultivation in Tanghe Sorgh area (how to harvest Anghoze resin and cultivation) * joint operation by NRWGO training office, MENARID, PPP	Stake holders in Kohgiluyeh-va-Buyeh Ahmad, NRWGO/ Kohgiluyeh-va-Buyeh Ahmad province	September 2016
7	Experience exchange meeting	All CFs, other villagers who have been active for activities/ Capacity	Site visit to Mazerashte protected area, highland rangeland monitoring plot and operation of setting the plot * NRWGO extension officers and	Mazerashte CF, NRWGO/ Mazerashte	October 2016

		on reporting what already done, communication capacity	MENARID facilitator joined as facilitator training and doing OJT.		
8	Activities in villages evaluation workshop/ report on site visit of medicinal plants cultivation	CFs who went to site visit/ Capacity on liaison, presentation, implementation	Each activity which had been introduced by the project was evaluated and review the participants and for future Site visit contents were presented to other villagers who had not gone to site visit. * NRWGO extension officers and MENARID facilitator joined as facilitator training and doing OJT.	CF who go site visit/ Each village	November 2016

(5) Monitor, evaluate and obtain feedback of the trainings by CF training participants.

Roles of CFs were taking a big part in the project activities in fields for 5 years implemented period. About CF training monitoring and evaluation, through interview with true questions asking their experience and activities which had been done, as one of the aims to create their self-confidence for being aware their activities had been done, external evaluation on CF abilities were implemented by external persons, extension officers and facilitators. By that, this opportunity is working for CFs being aware the purpose of this is the capacity development of CF themselves. In this survey, extension officers of NRWGO and facilitators of MENARID had cooperated, the project aimed at getting the point to develop CFs capacity by them after this survey.

The method of this survey is that asking and interview in February 2016, then November 2016, checking and interviewing their changes during the period to the same CFs, and deciding relative condition of each ability, writing down the levels in later chart on 5 items.

Table 2-19 5 abilities of CF

Ability	Contents	Example
① Whole Coordination Ability	CFs can understand the project purpose and understand the villagers willing, then CF can connect together, purpose of project and willing of villagers.	CFs can fill the VAP format which was prepared and explained by the project, according to their instruction, CFs gather other villagers opinions and make the VAP. There are devastated rangeland in their common land and stakeholders are willing to rehabilitate their land as a rangeland. CFs get an information that NRWGO/ JAO have medicinal plant project in this area, then CFs ask more information about the project from staff and gathering the stakeholders, making proposal and submit to NRWGO/JAO.
② Link/connection with NRWGO	CFs know function of NRWGO, when some problems happened related to forest, rangeland and soil conservation in the village, easily to communicate to NRWGO staff besides of the project activities,	When critical soil erosion caused by melting snow are happened in back of the community, CFs explain the condition and call NRWGO staff to check the site. CFs already informed the protected site to NRWGO and when illegal trespass is happened in protected area, they call NRWGO will come for control.
③ Knowledge on the natural resources in the village	CFs understand the situation of forest and rangeland, and they know where there are problems or	CFs can explain on forest species, rangeland species and wild animals etc. when some natural resource experts visit their village. And CFs can introduce the sites.

	devastated lands. When NRWGO carry out projects, they can introduce and select the sites which are suitable for the projects.	CFs can introduce 3ha land where is suitable for forest enrichment project and CFs know the stakeholders of the lands.
<u>④ Communication ability with other villagers</u>	CFs can communicate all the stakeholders including some villagers who could not attend the meetings, or someone doesn't have an information access, when some group activities such as the project activities are carried out.	<p>A meeting is held for determination the training date, but some persons cannot come to the meeting because they have small children. CFs contact these persons for arrangement during the meeting or CFs informed them the training date decided.</p> <p>A meeting is held about medicinal plant project where can be cultivated, some persons cannot participate the meeting because they are in Khuzestan. So CFs propose that they will collect the opinions from all stakeholders after that they will decide the lands.</p> <p>CFs let them procedure for getting agreement from all stakeholders.</p>
<u>⑤ Satisfaction and achievements on the activities</u>	CFs continue activities which are started by the project and other organizations with satisfactory up to now. CFs understand that they can do it through the activities which have been done.	<p>Before the training CFs had sewn by themselves, after the training they understood the step and they can sew more sophisticated cloths and now they continue sewing.</p> <p>Before CFs had been only expected to start beekeeping, but after the training which organized by the project they started to work on beekeeping. Now still they have just 1 beehive but they are satisfy for getting honey by themselves.</p> <p>CFs work as the leader of activity and also work with other organizations such work as gathering villager's opinion. They are happy for working on this because the village being good, so they have willing to continue as CF.</p>

As a result, the score of item; "connection ability between NRWGO", upgraded +0.9, and secondly, item; "communication ability with other villagers", upgraded +0.7, and, as an average of five items, score was upgraded +0.35 in total. Because of the survey interval was 9 month; bit short, and due to the first survey of the extended phase was conducted at the project implemented term were already 5 years that ability of the CFs also were comparatively at high level, differences of the score between the 2 survey points was not so significant, but can be said that, as a whole, better than before. And it was understood that on the connection between NRWGO are gradually getting higher. Another effect of the evaluation workshop was implementation side could have consciousness on capacity strengthen, and good effect was achieved that they could view from a point that they are nursing their CFs.

2.2.3.7 Problems to be solved

(1) Participatory Implementation system

1) Villagers' organization

Although the project considered establishing a new organization in the villages, as cooperative, to enable villagers to implement activities independently, the project has not moved to establish the cooperatives due to time consuming procedure and works for the organization establishment and its cost for necessary to operate. Nonetheless, the project still keep in mind that cooperatives are essential to receive

orders from public works of NRWGO. Thus, it is suggested that NRWGO is party to establishment and maintenance of cooperative concerned activities in the future.

2) Fund to implement participatory activities

To enable the villagers to continue the activities and to initiate new businesses, the project surveyed villager's accessible funding sources, but it was clearly understood that there are no available financial infrastructure or institute because it is difficult to find guaranty of bank loan in mountainous area including Bazoft. That the project promoted micro-credit activities which have saving account by-themselves.

The project also expect, in the future, Iranian Financial service system, for which the villagers can access, are developed. Moreover, it is suggested that FRWO/NRWGO will establish at supporting microcredit activities as practical measure for the time being.

3) Human resources in NRWGO who lead participatory operations

The project activities are, as normal sense, extension officers of NRWGO and JAO were supposed to be in charge, but the project have conduct the operation with high-graded C/Ps and Iranian experts in order to to get successful achievement as a pilot model operation. FRWO and NRWGO are expected to build structure and systems to be able to work with the extension workers through managing between the needs of villagers and the policy of NRWGO, assigning high-grade C/P and expert as extension worker.

4) CF Capacity uplifting

As a hypothesis that CF will work as bridge the project with villagers and the project will bring up CF for the purpose. But in reality, there are limitation of human resources in the village to play such roles, and capability of them are variety by person. For these reasons, there were hardships to make training plans and implement at the same time, and thus, the project watched and observed their response for basically OJT and its practices, etc.. As a result of the observation, the project found that the training is a place to provide not only knowledge, techniques and technology to trainees, but also a tool to establish close relationship between the project and CF and to pull up the motivation of CFs, etc.

From this findings, it is suggested that NRWGO would have the above viewpoint for the future plan and implementation of CF trainings.

(2) Indicator to measure capability

In the project base works, the outputs of the project would be measured by indicators. Evaluation for capability of coordination, etc., was done through applying interviews and/or questionnaire method with acquiring and using comparative and qualitative measurement data, and the objective numeric score for the indicators were calculated.

In the case of capacity evaluation by NRWGO, it is suggested that NRWGO put importance on a point of comprehensive evaluation by not only numerical value about coordination ability but also ability as an expert through works.

2.2.4 Activities of the output 3

2.2.4.1 Achieved results of the 1st year

(1) Preparation VAP for participatory forest and rangeland management activities based on present condition of target villages

During the 1st year careful attention was paid for preparation of VAP in the target village. As the activities are to be done within the limitation of project period, preparation of fruit tree cultivation and establishment of protected area of forest were carried out in advance. Points of attention for preparation of VAP grasped in the village survey during the 1st year and expected types of activities and also form of people's participation are described hereunder.

1) A process of consensus formation between NRWGO experts and the villagers through mutual dialogs during the planning stage

The government side have accumulated information as technical government group that, within the responsible sector, they have knowledge, roughly but not in detailed, on the subject to be done (what kind of supportive measure may available to the village), technical solution, necessary investment amount and availability of government fund for the project and available funding field and/or subsidy rate.

Thus, if the knowledge and idea of problems were matched between the government and the village, explanation of above mentioned technical solution, necessary investment amount and availability of government fund for the project and available funding field and/or subsidy rate shall be done. And, through the dialogs, if the villagers agreed on the explanation, in this case, as a next step, procedure of detailed plan discussions among the villagers and JICA/NRWGO is necessary with a manner of equal partnership.

2) Participation of villagers in the operation stage

There are differences in motivations/incentives between the activities of (a), (b-1) and (b-2). Tentative order of difficulties are ; (a)>(b-1)>(b-2)

Item (a): vegetation recovery

Nature of the participation in this sector is participation for public work to achieve public benefit. Profit and loss are different by 1.Contract concerned people and the conservation area guardsmen 2.Fire wood collector, resident and nomad who have grazing animals

Contract concerned people and the conservation area guardsmen have short term benefit during the operation period. No benefit when the operation have finished. Fire wood collectors will not be affected by the operation, if they can collect fire wood in other places, and will have benefit in the long range. Benefit of the resident and nomad who have grazing animals will be reduced in the short term and have small benefit in the long term by the recovery of grass production capacity. Thus, short term decrease in benefit may cause problems. By simple calculation, if the total amount of grass determines quantity of grazing animal, grass area decreasing causes available grazing number of animals.

In relation to the vegetation recovery, after the fallow establishment, it is said that grass recovery appears within 3 years and tree species regenerate within 7 years. If this was true, grazing animals can not enjoy grass in the fallow during 4 to 7 years term even the grass land was recovered. Grazing people will face strong temptation of feeding of grasses in the foreground. Compensation of correspondent amount of decreased animals for the residential and nomad grazing people can be a first truck to keep cooperation mind of villagers.

Item (b-1): irrigation and fruit

Nature of participation in this sector is securing of irrigation water and fruit farming through mini-public work. The fruit farming works will be exercise level to learn fruit tree management level and cash income may promise to participated villagers after establishing fruit garden. Whether the villagers can

wait the long tending term before fruiting, and whether they can tolerate to cooperative works of irrigation water and diseases/pest control and maintenance of dropped out villager's land could be raised as problems in the operation term.

During the period, if there are suitable lands for fruit garden, some villagers may show their will to expand the kind of fruit garden.

Item (b-2): improvement of livelihood

Nature of participation in this sector is women's livelihood improvement movement which has less public work character. For the meantime, making of goods for replacement of purchasing goods, such as vegetables, clothes, artificial goods, jams, etc., and extension of health care knowledge can be starter activities. If these activities may developed and achieved a level of making goods having commercially available quality and quantity, building public workshop or meeting room commercial activities may be coming in sights. The sector has possibilities to achieve something within short period, the sector can be attractive/ easy to participate for the one able to keep interest in the item and having available time.

2.2.4.2 Achieved results of the 2nd Year

(1) Preparation VAP for participatory forest and rangeland management activities based on present condition of target villages/ Discussion and agree common target/goal and necessary VAP for sustainable use and protecting Model Plots with local residents of target villages.

The overall workshop was conducted in 5 villages (plus 1 village, Robotkoh) to understand village action plan framework. The number of participants and discussion contents are different from the 5 village. But the framework of village action plan was agreed by the villagers in 5 villages. So the preparation of each activity such as 1) forest and rangeland management, 2) community development (fruit tree garden/income generation) in 5 villages is started by community facilitator.

Table 2-20 Overall workshops held during the 2011

Village	Date/Time	Venue	Participant
Gazestan	7/4 19:00-20:30	Mosque	25(male12, female13)
Tarom	7/5 10:00-11:00	Mr. Kazemi house	13 (male10, female 3)
Robotokoh	7/5 10:00-11:00	Open area in village	20 (male 10, female 10)
Mazerashte	7/5 10:00-11:00	Mr. Eidivandi house	20(male 20)
Dourak Sofla	7/5 18:30-20:30	Open area in village	18 (male 8, female 10)
Tabarak Sofla	7/6 10:00-12:00	mosque	46 (male 8, female 8)

1) Explanation of the forest and rangeland management activity

After overall workshop forest and rangeland management group visited the 5 village to explain the activity of forest and rangeland management by using the illustration of each activity. And project expert discussed with villagers and community facilitator (CF) about the priority of activity in the forest and rangeland management.

According to the discussion among JICA, NRWGO and the community facilitator (CF) in workshop, the priority of forest and rangeland management activity in the each village is as follows.

Table2-21 Priority of project activity in each pilot villages

Village	Priority	Activities	Remarks
Tabarak Sofla	No1	Support to protected area management by cooperative (Fence along the road, medicinal plant, guard) Protected area (established in this year)	Plan (Entrance fee of park) , Information board establishment
	No2	Small scale nursery (Training can be served by this activity)	Check dam construction for gully control
	Others	Experimental area (proposed by C/P)	
Mazerashte	No1	Protected Area (established 2 years ago) Seeds of medicinal plant, guard	Agreement of protection area and license of guard, Village needs 30kg of seeds of medicinal plants
	No2	Check Dam (target for under 1m depth of gully recommended by JICA project experts.)	
	Others	Small scale nursery	
Dourak Sofla	No1	Check Dam (location of target gully needs to excise)	It needs to confirm the contents of forest management plan by NRWGO
	No2	Protected Area (established in this year). Seeds of medicinal plant, guard	
	Others		
Taron	No1	Protected area (There is some candidate in the village, CF will establish the implementation body, Fence and guard needs to excise)	It needs to examine implementer and spend time for smooth project implementation
	No2		
	Others	Request for construction of check dam. But scale of gully is wide. CF opens his mind to planting trees around school by the pupils.	
Gazestan	No1	Protected area (2 or 3 members of Guard, fence, medicinal plant, a parts of fence inside the protected area)	Donkeys were in forest and rangeland in addition to sheep and goat. We request responsible persons who guard in protected area.
	No2	NRWGO studied and formulated the galley control in this village 2 years ago.	
	Others	Villagers agreed the contents of tree planting around the school. Young villager wants to try to plant medicinal plant in the highland rangeland (2000m above sea level).	

2) Confirmation and decision of project site for forest and rangeland management

According to the priority of the forest and rangeland management activity JICA and NRWGO experts went to the village and to decide the project site with the CF and land owner. The result of the decision and confirmation is as follows.

Table 2-22 Outline of Project Site

Village	Result
Tabarak Sofla	Protected area for forest regeneration (about 60ha) already established by village cooperative. The target of protection area will protect vegetation and serve villagers and other visitors good natural condition. Some villagers have experience of construction of small scale nursery
Mazerashte	Protected area (1,200ha) for forest regeneration already was established 2 years ago by villagers group. Protection area will target for restoration natural vegetation. The soil erosion (gully) has occurred in the farmland and the water supply house located near the gully erosion area.
Durak Sofla	Protected area (40ha) for forest regeneration already by villagers group on the basis of the forest plan by NRWGO (in 2000). The protection area is target for restoration vegetation by sowing of Aljan and establish the fruit tree planting. Agroforestry system will be introduced in farmland for the maintaining the soil fertility.

Tarom	Protected area (30ha) will be established by villagers group. The target of protected area is to restore the small secondary forest. This protected area locates near the village. The trees will be planted around the school and cemetery by the pupils and villagers
Gazestan	Protected area (6ha) will be established by villagers group. There is many big mother tree comparison with other protected area. This protection area some of villagers want to try sowing the medicinal plants in the high elevation area including the rangeland. The trees will be planted around the school and cemetery by the pupils and villagers

3) Selection of protected area

In 2010 the forest and range land survey was conducted for selection of protected area. Japanese and Iranian experts selected the candidate protected area on the basis of above study. In 2011 Japanese and Iranian experts examined the candidate site for protected area with opinions of representative and field verification according to the following criteria.

Table 2-23 Criteria of Selection of Protected Area

Item	Condition (requirement)	Remarks
Location	Near the village	The protection area which is far from village has problems maintaining and demonstrating. On the other hand protection area which locates near the village is easy to be affected by the grazing.
Topography	Middle inclination, excluding the rocky area	Gentle slope is easy to be affected by grazing. Steep slope which soil is luck is difficult to recover the vegetation.
Vegetation	Regeneration and restoration of vegetation is expected	Mother tree exists. Capability of sprouting remains. The condition for natural regeneration will be clear through protected area.
Size of protection area	The size of protection area will be decided within practical limits and the area is not separated.	Basic concept of size area is up to the villagers.
Land ownership	The land ownership and land use are clear.	Customary use in national land is practical. The area is suitable for no problem of land ownership and land use.
Demonstration effect	Everybody can observe in protected area. Regeneration and restoration of vegetation is expected.	To understand the regeneration activity and condition, The location is easy to access.
Willingness of villagers	Villagers are highly interested in protected area and intend to cooperate the establishment and maintenance of protected area. Confirmation of villager's opinion will be conducted.	Villagers intend to participate JICA project and to maintain the protected area by themselves.
Others	Existence of maintenance and management body (cf. village forest protection group) is possible in the targeted village. Taking the result of baseline survey into consideration.	It is necessary to keep villagers from abundance of maintenance management after a setting of protected area.

4) Supplement survey for Training on livelihood improvement

Training course needs list has prepared for man and women separately. Based on the list, supplement survey to prioritize from the point of activities for income generation.

Result of the survey for women revealed that sewing training get a high priority in all villages, while the survey for all villager, mainly reflect view of men, fruit, medicinal plant and wild celery, bee keeping etc. got high score.

Table 2-24 Results of training request survey by gender

	Gazestan	Dorak Sofla	Mazerashte	Tarom	Robotkoh	Tabarak Sofla
No. HH	128	28~ 42	40	30	60	100
No. Pop.	713 M388, F325	190 M101, F89	220 400w/nomads	120	300	900
Participant	Workshop F6, M10	Group interview F10, M10	Interview F10, M10	Interview F10, M10	Group interview F:10, M:10	Workshop F15, M15
Training for farmer (man)	Fruits garden	Fruits garden	Beekeeping	Pest control of fruits garden	Fruits garden	Wheat & Barley
	Medicinal Plant	Beekeeping	Fruits garden	Rangeland Management	Beekeeping	Fodder production
	Forest & Rangeland Management	Medicinal plants	Animal Management		Animal management	Animal management
Training for Women	Sewing	Sewing	Sewing	Sewing	Sewing	Sewing
	Carpet weaving	Carpet Weaving	Carpet weaving	Milking cow	Hair dressing	Hen & chicken Management
		Chooga making	Hen & chicken Management	Medicinal plant	Medicinal plants	Medicinal plants

5) Consideration on methods of implementation of livelihood improvement activities

Major active organizations of training in village area are Technical Vocational Training Institute and JAO training center at present. Training Implementation method of each organization has studied to find out appropriate method for the training in the pilot project villages.

It has concluded that the Technical Institute training system is adaptive for sewing and JAO training center system is adaptive for fruit and wild vegetable training.

6) Explanation of draft contract of Village Action plan (VAP)

JICA expert and NRWGO counterpart explained the draft contract of Village Action Plan (VAP) related to participatory forest and rangeland management. There were some problems which are difficulty to get consensus among the people, uncertainty of role of CF, confirmation of activity group and number of guard for protected area.

(2) Implementation of VAP, monitoring, evaluation and feedback of activities with VAP participants, Monitor, evaluate and obtain feedback on activities by VAP participants.

After the workshop and discussion with each activity group forest and rangeland activity and rural development activity started. Because the 2nd year has just started, monitoring, evaluation and feedback of the project by the participants were conducted independently by each group and the findings were made use in the following year.

1) Forest and rangeland regeneration management

① Protected area

One Protected area was established in targeted villages as planned.

② Fence construction

JICA project constructed the fence surrounding the protected area which fence was needed. At the end of 2nd year fence construction finished in Gazestan village (600m) and in Tarom village(600m) it was under construction. In Tabarak Sofla village(700m) there was a problem on public road that passes through the protected area. NRWGO negotiated the Road Construction Department about fence construction along the road. Although the fence construction work took much time, construction work by the local people contributes income generation and people participation in the village.

③ Sowing of oak seeds

In the 2nd year yield of seeds of oak was average and the period of mature of seeds delayed. Though JICA project had planned to start this activity at the end of October 2011, the sowing of oak seeds changed to start at the beginning of November in Tarom village. JICA project intended to procure the seeds for sowing from each village. But because of bad yield of seeds in that year, JICA project procured seeds at Gazestan village where many mother trees exist, then sowed them.

④ Monitoring work of oak regeneration

JICA project established experimental plots to monitor the experiment of natural regeneration and artificial regeneration of oak. Establishment and study of experiment plot was finished until at the middle of November 2014.

⑤ Sowing of Medicinal plant seeds

Wild celery had high needs among the villagers. But it was bad yield year. JICA project planned to use Barije (*Galraram ferula*) and Khakeshir (*Sisymbrium sophia*) instead of wild celery. Both medicinal plants are popular with villagers and targeted villages (Tabark sofla, Gazestan, Mazerashte) accepted to use those plant species. While Mazerashte village intended to start to cultivate wild celery next year due to the issue of available land.

⑥ Guard

Some of village finished to select guard for protected area until the conclusion of contract. Other village continues to select guard yet. In the 2nd year JICA project explained not to able to pay salary to guard from December to next February 2011 due to constraint of contract limitation with JICA. Each village accepted this issue.

⑦ Check dam construction

JICA project constructed check dams at gully in Mazerashte village and Durak Sofla village.

⑧ Small scale nursery construction

Small scale nursery constructed in Tabarak Sofla village. Village provides small land for nursery practice near the river where no worry about water supply. In the 2nd year villagers raised walnuts in the nursery.

⑨ Information board construction

Information board set the entrance of protected area for the villagers and visitors. During this period JICA project selected the setting point and set the board until the end of November.

2) Procurement for forest and rangeland management activity

① Procurement of external expert and supervisor

After finishing the 2nd year activity, JICA expert asked the procurement of external expert and supervisor to counterpart. But it is very difficult to find them until the beginning of the second field activity in 2011. When the second field activity started counterpart could introduce at last. JICA expert met and employed the following external expert and supervisor. On their employment, JICA expert confirmed that they did not assign NRWGO work during JICA activity through the counterpart.

② Procurement of material for work and planting

JICA project procured the materials for activity in Bazoft as much as possible. But the materials which could not procure in Bazoft was bought mainly in Shahrekord.

Table2-25 Procurement of Materials

Activity	Procurement place	Materials
Fence construction	Shahrekord	Iron post, Barbed wire, Cement, Shovel, monocycle, etc.
	Bazoft	Gravel
Check dam construction	Shahrekord	Shovel, monocycle, etc.
	Bazoft	Stone for dry masonry
Experiment of regeneration	Bazoft	Iron bar for monitoring plot
Sowing of oak, Small scale nursery construction, Medicinal plat sowing,	Isfahan	Seeds of medicinal plant (procurement from private company because of lack of wild celery seeds in NRGGO, Koohrang district)
	Shahrekord	Seeds of walnuts, planting pot
	Bazoft	Seeds of oak (from Gazestan village)

③ Labor procurement

Labor for each activity was procured from the village to deepen understanding of this project among the villagers by recommendation from the representative of village.

3) Community development activities

① Orchard Establishment

a- Technical procedures

Based on village demand and consideration of natural and social conditions such as availability of private land and water sources, decision on orchard establishment was made.

Since private lands are shared by members of a family or clan, in using it for any purpose understanding and approval of all relevant persons need to be obtained. The CF for orchard establishment contacted all the concerned people and gained their written agreement of allowing the specific piece of land for making orchards.

b- Procurement of materials and equipment for orchard establishment

To protect the saplings from livestock attach and prevent illegal entry of people, the planted areas (five sites) were enclosed by fence.

Seedlings, irrigation facility and fence are necessary for the construction, so that regarding the cost sharing, it was so decided that material cost was shared by the project, while the planting works and maintenance works were shared by the group of each orchard activity.

Samplings of various fruit trees were procured from an authorized nursery and planted in the designated land.

Table 2-26 Number of saplings planted in each site

Site and size (ha)	Peach	Apple	Quince	Pomegranate	Pear	Walnut	Almond	Grape	Apricot	Total
Tabarak Sofla (0.40)	200	0	25	0	25	0	0	0	50	300
Tarom-1 (0.45)	100	30	10	0	20	10	0	0	30	200
Tarom-2 (0.30)	50	20	0	50	0	10	20	30	20	200
Durak Sofla (1.0)	200	0	0	50	0	25	100	25	0	400
Mazerashte (0.68)	200	0	30	15	15	35	25	0	30	350
Grand Total (2.83 ha)	750	50	65	115	60	80	145	55	130	1450

Materials used in establishment of orchards are listed below.

Table 2-27 Materials used in establishment of orchards

Site (Village)	Type of pipe	Length of pipe (meter)	Type of pump	Water source	Means of irrigation	Irrigation method	Required Accessories (piece/dimension)
Tabarak Sofla	Not required	0	Not required	Adjoining canal	Gravity	Traditional	0
Tarom-1	Polyethylene 2 inch, 6 bar	70	Not required	Adjoining spring	Gravity	Traditional	Valve 2, Joint 2, tripartite 2
Tarom-2	Polyethylene 2 inch, 6 bar	100	Single-phased 15-Ampere	Adjoining spring	Pumping	Traditional	20-Ampere cable 150 meter, Concrete pool at pumping site with dimension 1x1x1 m, and storage pond with dimension 2x5x1 m
Durak Sofla	Polyethylene 4 inch, 10 bar	150	Note required	Adjoining irrigation pipeline	Gravity	Traditional	Water division pool of dimension 1x1x0.7 m
Mazerashte	Polyethylene 4 inch, 10 bar; Cast-iron 6 inch	70 8	Note required	Adjoining irrigation canal	Gravity	Traditional	Water division pool of dimension 1x1x0.7 m

Specification for fence and construction materials are given herein

Table 2-28 Specification of fence and construction materials

Galvanized metal pole	Galvanized metal fence	Cement	Cart	Shovel	Pick
Height 2.4 m Number 568	Width 2 m Length 1704 m	250 bags, each bag 50 kg (totally 12500 kg)	13 units	23 units	23 units

② Training for women on dressmaking training

Training quality is secured because of vocational training center curriculum is based on the International standard, and the certificate of completion of the training is required to request bank loan, therefore dressmaking training was entrusted to this center directly. At first the center checked the site

before the training. teachers. Since it was the first time for most of applicants for dressmaking training, the teachers recommended that sewing training and knitting training might combine for not getting tired.

In the contract between the center and the project team, the training center provided teachers basic wage, machine and all other equipment required for the training, as well monitored the work progress. Based on this, 600 hours training with 5 sewing teachers in 5 training sites were conducted by the project.

However Bazoft area is a remote area and infrastructure is not enough, such as allowance to the teachers, accommodations, training places, transportation fee were provided by the project. It was arranged while confirmation in the field.

It seemed that trainees feel pleasure of learning from the series of training. In the monitoring, trainees explained what they learned and showed their production in the training. The training institute supervised periodically, checking training quality and providing materials. Final test was carried out for checking the learning level by outside examiner.

③ Wild vegetable training for farmers

Medicinal plants and wild vegetable marketing was implemented in Farsan located 30 min. from Shahrekord by car. There are many kind of Medicinal plant, wild vegetables and Herbs, such as; Kerabs, Musir, Tarre, Nano, Andasht, Ribos, Pune, Kardin, Zereshk, Somak, Khakishir, Siviz, Gorre zabon, Abishan, Bonsor... were observed in the market. Their usage is eating directly and they dry and put kebab, yogurt and etc. and boil for drinking. Medicinal plants and dried wild vegetables are sold in Farsan town where is near Bazoft area, but the products are came from Esfahan. The price differs from each other, but the price of dried ones were around 15,000rial/100g. (as of 2011)

To find qualified trainers for plant growing, the project team visited the Forest rangeland research institute of the Azad university and Elmi-va-karbordi university, but it was found that there are no expert on wild vegetable field. Site visit to innovative farmer to Brujen district located 1.5 hours from Shahrekord was conducted. Extract herbal water, Saffron cultivation, herb cultivation, and fruits processing were implemented there by female farmer. She did not deal with wild vegetable. Finally the project team found that NRWGO staff know wild vegetable cultivation more than others. Academic teacher and practical teacher were assigned.

The training conducted with VTR, power point and practice in the field. There have been 2 days continuous rain and facing wet ground on the 3rd day that field practices have been shortened to a demonstration of how to sow. It was understood that weather operate demonstration or not cause significant different on understandings of training contents. At the same day, wild celery seeds ware distributed even thought less than 50g for each person, talking to sow the seeds on each trainee's garden or cultivation field in the trial base. Mazerashte 24 persons, Durak Sofla downside 24 persons, Durak Sofla upside 16 persons, Tarom 11 persons, Tabarak Sofla 29 persons, Gazestan 18 persons received the class.

Wild celery seeds harvest quantities is different year by year. Because 2011 was low harvest year, it was difficult to purchase the seeds. Celery seed needs treatment for germination that it must keep in specific low temperature and wet condition in specific period. It takes 3 to 7 years for harvesting wild celery. Wild celery can be sold expensive, that why villagers have more interests on it.

④ Training on orchard management

Since best timing of sapling planting at the demonstration orchard nursery is spring, the training was carried out in March 2012 before Nowruz, the Iranian new year.

2.2.4.3 Achieved results of the third year

(1) Preparation of VAP for participation forest and rangeland management activities based on present condition of target villages

Workshop for VAP review and improvement were performed at each village separately. Thereafter two cross-sectoral overall workshops were held with participation of all concerned people, including the members of project team. The revised VAP was agreed and signed. These workshops were held for two reasons:

- ① To clarify project activities in each village and know the opinions of villagers on those activities
- ② To provide OJT opportunity to CFs on making presentation about their activities.

Table 2-29 Information on workshops held during the third year Schedule:

Date	Village
30 of April, 2012	Inter-village WS: Gazestan, Tabarak Sofla The day before inter-village workshop, CF had other WS for preparation of presentation of activities.
1 of May, 2012	Inter-village WS: Tarom, Durak Sofla, Mazerashte The day before inter-village workshop, CF had other WS for preparation of presentation of activities.
2 of May, 2012	Whole CF seminar in JAO, Telurd

(2) Implementation of VAP

Forest and rangeland management activity and community development activity was started by workshop and discussions among each activity group

1) Forest and rangeland management activity

① Maintenance of Protected area

In Model protected areas established in each village during the 2nd year. the following activities for vegetation restoration activity was started.

Table2-30 Result of forest and rangeland activity (2012)

Activity	Contents
Patrol	A guard has employed during March to November to guard the protected area of each village and patrolled the protected areas. Binocular, uniform and etc. have been prepared for effective patrol around area.
Fence construction	Maintenance and repair have been implemented. Fences in Gazestan village and Tarom village had no damage. In Tabarak village, the fence pushed in connection with the road improvement work of the Road Construction Department. Fence fallen and buried with soil removal work such as banking and the cutting, so that repair work was carried out.
Signboard	Signboard which express area and location of each model protected area have already prepared and small signboard to indicate the territory of protected area have prepared and installed 3 rd year.
Monitoring work of oak regeneration	Small monitoring plots have established to monitor regeneration condition of each model protected area and have been monitored by a employed local expert. The study has been conducted and report has been prepared based on the study result of spring, summer and autumn at established experiment plots of natural and artificial (by seeding) regeneration of <i>Quercus</i> spp.
Sawing of oak seeds	This year was good harvest of <i>Quercus</i> seeds. The seeding works have conducted in Tarom village and Durak Sofla village from since early November as scheduled.

Sowing of Medicinal plat seeds	This year was good harvest of wild celery seeds and that enough quantity of the seeds has obtained. These seeds have sown in the model protected area in Durak Sofla village and Mazerashte village. While in Gazestan village, new protected area establishment and seeding of wild celery has planned. But it has postponed to 4 th year due to land issue could not be solved within the 3 rd year end.
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②Planting in public land

During the environment week in March, primary school surrounding area in Gazestan village and Tarom village, have been implemented with participation of the teachers and pupils. Unfortunately the drawing-out incident of the seedling occurred in Tarom village. The suspected person is not identified that instruction was given to prevent the kind of case by head of Bazoft office, NRW. The project will conduct the planting again in Tarom in the 4th year. In Gazestan village, watering have not been continued during the summer vacation and some of seedlings have dried. Some donkey eat the seedling and damage also were happened so that survived seedlings have been covered by wire net.

③Agroforestry

Planned agroforestry activity to be carried out in the 3rd year in Durak Sofla village was not carried out, because appropriate site could not be identified by land right issues among villagers. After JICA mid-term review mission, Joint meeting with forest and rangeland group and community development group has been held and concluded to collaborate and share the agroforestry activities. Appropriate site finding survey has been conducted in Gazestan village, Tabarak Sofla village and Mazerashte village.

④Check dam

During the 2nd year, check dams in gully have been constructed in Mazerashte and Durak Sofla village. During the 3rd year, new check dams have been constructed in Tabarak Sofla village and training has been done. Reinforcement work for constructed check dam was required because of snow melting and water flow in spring time. Such a kind of maintenances shall continuously be done. Vegetation recovery work and wicker work surroundings check dam was examined.

⑤Small -scale nursery

Walnuts seed has been sown in the small- scale nursery in Tabarak Sofla village. New small scale nurseries have been established in Durak Sofla village and Gazestan village.

⑥Assistance for Robatkoh village's highland development plan

Registered official residences of villagers in Robatkoh sub-village locate in neighboring province of Khuzestan and Esfahan. Number of land right owners or land utilization right owners of the Robatkoh highland is counted approximately 200 persons. Tarom & Robatkoh multi-cooperative which are dormant state in long time, hereinafter called as "T&R cooperative", newly selected young managing director Mr. Mohammad Reza Kazemi who lives in Esfahan province. Because of the action plan submitted by T&R cooperative to the project was just like a list of their willing/hopes without any actual survey on land condition and their social situation ,etc.. Twice of field survey were conducted, with Technical deputy of NRWGO and Mr. Kazemi, manager of the cooperative, which was summarized as "Robatkoh highland utilization- summarized results of survey-) was drafted. As mentioned, the action plan which was drafted by the T&R cooperative was just a concept and wishing list type plan on the highland, which has needs

totally be reviewed. That field survey report which include; a) consideration on field natural condition for improvement of over-grazing bared land, b) checking the land rights relationships according to each big family, c) making rough plan of land utilization based on the field survey about development potential on utilization of forest and rangeland, and d) the process and survey items needed to request permission of land utilization from NRWGO, which T&R cooperative would make forest and rangeland management detail plan for future.

Above summary results of survey and the matrix of process and survey items needed to request permission of land utilization from NRWGO have explained to C/P and to Mr. Kazemi.

2) Community development activities

① Implementation of VAP on orchard establishment

CFs, NRWGO, as representatives of villages signed the VAPs, and then the implementation works started. Fence, gate and other facilities were established by labor of villagers, while the project team provided technical guidance by hiring an engineer, who was familiar with the area. Wage for labors was not supported by the project.

Quality saplings were procured from an authorized nursery in Karaj city and transported to Bazoft in planting time. In first day of planting the manager of nursery came to Bazoft and provided voluntary training on sapling planting to the participants. Maintenance of the orchards was conducted by themselves on irrigation and pruning. Some shoots were sprouted from the base of grafted seedling, so immediately the project held OJT on pruning.

To use the space available among the tree sapling and generate benefit to participants, intercropping of vegetable was undertaken. Seeds of various plants were bought by project team and delivered to participants for planting in the orchards. The project team regularly monitored the intercropping situation and took notes. Species of vegetable and quantity of seeds supplied to the village are shown in the following table

Table 2-31 Situation of intercropping in 5 villages

Village/ Site	Plant Seed and Quantity											
	Potato (kg)	Watermelo (g)	Melon (g)	cucumber (g)	Sunflower (g)	Beans (g)	Pumpkin (g)	Basil (g)	Leek (g)	Radish (g)	Cress (g)	Broom*
Tabarak Sofla	50	6	6	24	150	8	18	12	12	12	12	200
Tarom Site 1	25	6	6	12	250	7	6	12	12	12	12	100
Tarom Site 2	25	6	18	18	250	7	6	24	24	24	24	100
Dorak Sofla	200	12	18	18	500	30	18	12	12	12	12	250
Mazeh Rashet	200	18	6	24	500	15	6	12	12	12	12	250
Total	500	48	54	84	1650	67	54	72	72	72	72	900

* *Broom* is a plant grown for making cleaning tools (broom) from its stiff fibers.

To give an insight of modern orchard to CFs, they were taken to famous fruit growing area (Saman) in Chaharmahal-va-Bakhtiari province on 3 September, 2012. Totally 23 people, including personnel of Bazoft agriculture office were participated in this study tour.

② Sewing training for women

Firstly we had to make the VAPs preceded from 2nd year, and then made a contract to TVTO for the continuous training activities and we started to implement. Additionally, middle stage of the sewing training, we tried to have selling test, it caused the trainees to increase their motivation. After completion of entire training course, trainees could pass the final test and they could receive the certification from the Technical Institute. This certificate can fill the one condition of receiving bank loan.

a- Sewing training was conducted for 460 hours by TVTO:

Table 2-32 Outline of sewing class in each village

Village	No. participants at the beginning	No. participants at the end	Memo
Mazarashte	14	12	CF who had been selected in 2 nd year, she has been married and left the village, then trainees selected 30s lady as a CF, because other trainees are too young to listen others. But when CF needs to write and calculate, they chosen assistant CF from the young. Affect of young age, the quality of products are not so fine.
Durak Sofla down	13	9	This year also we had a problem of selection of the site. CF has been engaged, so she often leaves the village. But she is eager to finalize the training, she also works as CF. In this village, there are many women who can weave carpets and Chough, traditional cloth of Bakhtiari, it seems that women of this village are so skillful in hand making, so the product quality is good.
Durak Sofla up	13	13	Last year, they had a problem of selection of CF. But after the CF selected, CF works so hard and precisely, this village unity came out. This is only the village that from the start until the end of training, all were able to complete. There are many skillful ladies in this village, the production quality is excellent.
Tarom	7	6	One of the trainee could not continue due to child-birth, rest of 6 trainees continued. But 3 of them who had lived in Tarom before, after their marriage they moved to Telurd. They came from Telurd everyday. Because of small number of trainees, there is limitation of human resource who can work as CF.
Tabarak Sofla	10	9	This village's trainees, mainly CF, have more advanced idea about after the sewing training. They want to commercialize the sewing production. They ware keen to test selling activities. It might be close to the town, they would bring the production to the town, like ChamGhale.
Gazestan	11	6	Because of problem in last year, we started the training from 3 rd year. Initially trainees were 11, after there were some people who emigrated to the city, it was reduced to nearly half, others we didn't know the reasons why gave up this training. CF is the staff of health center in Gazestan, she has high capacity to work as CF, like collect the information from the villagers. This village are isolated from the other 4 pilot villages, therefore they could sell the test production near their village.

b- Trial sale of sewing products and marketing survey

In order to understand the actual conditions of market around the village and potential of people's income source, and to confirm the results of training trial sale was carried out with fixed amount support from the project.

c- Support for application to bank loan:

Connecting to bank loan was requested from villagers, we communicated to Technical Institute for asking their continuous support about bank loan. As well as Technical Institute, cause of this training course had best results in rural area training, they try to record this good example as a good practice case,

and they might have efforts to connect this result to small domestic business. Technical Institute would collect the necessity documents to each site by in charge of this training, and then they would be responsible to the bank stage.

③ Wild celery survey for wild vegetable training

Wild celery is prospected production for income generation, but there are few information for dissemination in practical project. Technical development has not been done in university nor research center. In words NRWGO staff have more knowledge on wild celery. As such reasons, we consulted to Rangeland office in NRWGO about development on propagation of wild celery with Rangeland office, and then before the technical development, we arrived at the idea which we should know wild celery itself, we would start the ecological survey and start trial test. We went to Birahegoon village in Koohrang District at 14 May. After that root and stem were collected from May to November in 2012, then vegetative propagation test was carried out using the root and the stem which were collected in the survey. This test results were failed. Regarding the seed propagation, we tried to produce seedling by pot in seedling production training at each village.

④ Seedling production training in small scale nursery

Training contents in the field of rural development for the villagers were decided by PRA workshop taking into account of request hearing survey and condition of resources like teachers. However according to the recommendation from mid-term review team, even in community development field activities might be directly related to forest and rangeland, and also Mr. Rezazadeh, C/P of Community Development, inspired from community development activities of UNDP project, we would start to implement the seedling production in small scale nursery which could start in small space like in front of their house. In forest & rangeland field activities, there are similar activities. But in which we focus on the cash crops seedling and participation of women community development field. That's why we produce wild celery seedling within this activity.

For this seedling production activity, especially fruits trees seedling can be sold to other persons, we need more technical support, we would work with JAO for technical support of fruits gardens. In November, 2012, the project expert, NRWGO expert and participants agreed VAP on this activity.

3) Procurement for forest and rangeland management activity

Following 2nd year, local experts and field supervisor have been employed. The project has procured the materials for the activities in Bazoft as much as possible. Other than above, the project has procured the materials mainly in Shahrekord. The labors for each activity have been procured from the local people to understand this project through the recommendation by representative of village.

(3) Monitor, evaluate and obtain feedback on activities by VAP participants.

To understand the satisfaction rate of villagers on project activities and outcome VAP, evaluation surveys were conducted on two days; 6th November 2012 and 14th November 2012 by holding workshop at each village. The participants actively evaluated the function of the project team as feedback for further consideration. Ratings given by villages are summarized in Table below.

Table2-33 Score given to each activity by villages

	Gazestan	Tarom	Durak Sofla	Tabarak Sofla	Mazerashte
Forest & Rangeland	18.12	19.00	16.47	16.40	18.25
Protection area	13.71	19.50	17.13	17.65	19.85
Check dam	--	--	--	16.45	18.25
Small scale nursery	--	--	--	16.55	--
Kelussia	17.60	16.50	--	17.00	18.33
Sewing	17.67	19.70	19.11	18.60	16.83
Orchard	--	19.80	16.79	19.25	18.22

2.2.4.4 Achieved results of the 4th year

(1) Preparation of VAP for participation forest and rangeland management activities based on present condition of target villages

Forest and rangeland management group reviewed the third year plan and revised. Joint village workshop to grasp total figure of village activities was held with community development group.

After workshop the contents of each activity was discussed and decided among stakeholder visiting around the villages. Serial WS have held in each village to establish VAP of the year and also aiming CF capacity building. Reviewing the project activities and discussing on issues rose from the review. Calendar making work method was applied to review 3rd year activities by time series. All activities of Forest and Rangeland and Community Development sector have put on a paper and which helped total figure of the project. The calendars have gathered and used for 5 village seminar for information exchange and CF's hold meeting OJT. CFs of each sector presented activities. The governor of Bazoft area, head preacher of Bazoft, 3 of extension office of MOJA, staffs of MOJA in Bazoft attended and exchanged information. The guests of attendees have joined observation tour in Tabarak Sofla protection area with explanation of the CF and expert/CP concerned.

Forest and rangeland management WS in each village was held to talk and decide about the content of Village Action Plan (VAP) among the villagers. 4th year VAP of forest and rangeland management activity was prepared and signed between villagers and JICA project.

Highland natural rangeland activities was formulated draft VAP covering highland rangeland in Robotkoh sub-village and hold explanatory workshop and requested sign of concerned stakeholders. But because of request from a stake holder to have another meeting for nomad who already moved that could not get agreement. The explanation of stakeholder was carried out in 5th year.

(2) Implementation VAP

1) Forest and rangeland management activity

① Maintenance of protected area

The regeneration has got apparent in spring season of 3rd year and further recovery and new plant species never seen for a long while were observed in the 4th year. In Gazestan village, rangeland Model protected area establishment has been considered through sowing of medicinal plant, but CF proposed to postpone the establishment of Model protected area because CF could not get agreement of land owner. And JICA project accepted proposal from CF.

Table2-34 Result of forest and rangeland activity (2013)

Activity	Contents
Patrol	Guard in each village has been employed for patrol and maintenance from March to November in protected area. CF of each village, in order to carry out patrol of the model protected area effectively, requested to increase the number of guard. The project accepted it with condition that the project spending for guard per year per village shall not be increased.
Fence construction	The repairing work of fence in Gazestan village and Tarom village was not necessary to repair. But in Tabarak Sofla village, some fences were toppled and a part buried by push ground and cut ground construction activities for road improvement by Road Construction Department. Cement and barbed wire required for repairing work were purchased from CF, and those materials were supplied to CF for repair work implementation.
Signboard	In some protection area, there were places where the display of the sign board was destroyed, and repairing work will be conducted next year.
Monitoring work of oak regeneration	For regeneration monitoring, employing a local expert, small monitoring plots have been established to monitor regeneration condition of each model protected area and have been monitored. The study has been conducted and the report has been prepared based on the study result of spring, summer and autumn, using established experiment plots in 2nd year for monitoring of natural and artificial (by seeding) regeneration of oak (<i>Quercus</i>). Moreover, in order to accelerate the natural regeneration of oak, ground treatment was conducted near the mother tree in this year. The regeneration situation of oak is as follows. In natural regeneration site, it was observed that many seeds regenerated seedling and those growth was good and which was get scarce in remote plot from mother tree. In the artificial regeneration, the growth is favorable than natural regeneration. It is necessary to observe differences of growth by differences of sun shade. Coppice regeneration survey has kept the survey shoot growth observation method only. In addition, the regeneration of oak out of model protected area has been prevented because of no seeds and grown seedlings have damage of livestock.
Sowing of Medicinal plat seeds	In the protected area of Mazerashte village, the seed of the wild celery sown in last year grew well. Wild celery seeds quality of this year were inferior to that of last year. However, the seed was distributed in each model protected area except Tarom village as planned, and sowing was conducted. In addition, there was a request that CF from Durak Sofla village and Tabarak Sofla village would like to grow wild almond in protection areas. The seed of the wild almond was supplied to Durak Sofla village.

②Planting in public land

For the Natural Resource Week in spring, tree seedlings were planted together with the teachers and the student in the schoolyard of the elementary school in Tabarak Sofla village. The situation of the maintenance of the planted tree is good. Suspect of uprooting plants of the primary school in Tarom village was not identified, where school planting was carried out in the third year. Then, an understanding to project activities were obtained by land owner and tree seedlings replant in the Tarom village elementary school in spring 2014 have been planned. However, a CF said that a teacher may transfer to other area within a year and cannot consider that kind of inside village matter. For that there may be not easy to coordinate with a teacher and a teacher has low motivation and interest in the school planting.

③Agroforestry

The activities were selected as joint project of forest and rangeland management group and community development group, because it was planned as one of the activities on soil conservation in forest and rangeland management group. Also it was realized, during fruit garden establishment by community development group activities, that there are many severe soil erosion in targeted area which wait for conserve activities and also which of combined works of terrace construction and live fence creation by forest species in fruits orchard can be deemed to be an agroforestry operation example.

The joint operation group has also cooperated with NRWGO staff training group. Because the operation was deemed as a method to lift up stuff of NRWGO operation ability when training on procedure of fruit garden establishment works were conducted concurrently Those groups have determined and shared each role as; land right matter and terrace construction are handled by forest and rangeland management group, Fruit cultivation and cost share arrangement are handled by community development group and staff OJT is handled by training group. Procedure of implementation of agroforestry is as follows.

- a. Explanation/ consultation with concerned villagers
- b. Suitable site selection
- c. Design with villagers and budget estimation (sign of VAP)
- d. Terrace, Fence construction and planting etc.

④ Check dam

The situation of the maintenance of the check dam of Mazerashte village, Durak Sofla village, and Tabarak Sofla village were good by having carried out reinforcement work in 2012. The check dam work was developed in Gazestan village in 4th year. Gully's depth has been targeted 1.5 m or less for construction of the check dam. Completion of construction schedule of this year was delay due to rain. Tree planting around the check dam and introduction of wicker work and greening were not able to implement by schedule delay and get into inappropriate season.

⑤ Small- scale nursery

Seeds of walnut were scheduled to sow into small-scale temporary nursery in Tabarak Sofla, village installed in 2nd year. However, the seeds supply was overdue for one year, and sowing of seeds were carried out in the next year. Since the seeds quality sown at the time was bad and subsequent growth was poor, nursery activity has stopped. Forest and rangeland management group supported community development group from the 4th year which was also developing small-scale nursery activities.

2) Highland Rangeland Regeneration Activity

① Selection and decision of Highland Rangeland regeneration survey area

On model area selection for detailed survey of highland rangeland management verification and for drafting of management method drafting activities, an appropriate site was selected during the spring time of the 4th year. Through a process of; candidate area in the 5 villages were surveyed by means of listening from village communities view, etc., these sites were compared its condition, and Highland Rangeland in Robotkoh (Saragale Dehkochak area) has remained among the candidate site. The candidate place was endorsed through reconfirmation of NRWGO and village stakeholders concerned and decided as a candidate of model area. That activity of “support activities for making of Robotkoh Highland Rangeland Village Action Plan and implementation” was merged to “Highland Rangel activity” and implemented.

② Support activities for Highland rangeland management possibility survey, drafting of management method and drafting of a plan (“Survey of present circumstance and grazing land management plan (conceptual draft) Making for Robatkoh Highland Rangeland”

To verify possibility of plan making of experimentation plan, etc., the project concerned persons have conducted reconnaissance of the highland to share information and concept for implementation.

NRWGO already has, formally surveyed and compiled, so called, “Momayezi survey data base table”, which include present situation of the rangeland utilization and grazing permit. The project employed a rangeland survey consultant in the summer to survey present situation and to draft grazing land management plan, and a report on “Robatkoh highland present situation and grazing land management plan was drafted.

Because of the report was made, basing on NRWGO assigned specification for “rangeland and its plan making report”, and submitted to NRWGO and which was endorsed, passing through a consultation process of Technical Committee of NRWGO.

③ VAP draft making and explanation for stake holders

Referring to Iranian rangeland expert report, VAP, major component of which are; a. sowing experimentation, b. establishment of permanent experiment plot, c. making of regeneration plan, has drafted and explained for the stake holders in September 2013.

a- Sowing experimentation

Grazing lands are degraded, if there are no rangeland improvement activities within a certain interval that the rangeland improvement activities have indispensably important value, if grazers have wills to continue their grazing activities.

But, because of the project could not get necessary data concerning after degraded rangeland in Bazoft area to implement the activities, the project planned to examine by simple method to get data on fodder seeds quantity and methods for vegetation recovery.

b- Establishment of permanent experiment plot

NRWGO's guidance for grazer in the field is, mainly, based on grazing number control to recover and sustain rangeland productivity, aiming to make a “balance and expansion of grass species and its quantities” applying methods of human disturbance for Natural ecosystem.

To meet the experimentation demand for continuous and long life survey on the vegetation change, permanent experiment plots, as control area which secures completely no grazing for survey, are designed. It is assumed that NRWGO also once intended to establish this kind of experimentation plot, but could not construct. Future plan would be a new one for NRWGO.

c- Making of regeneration plan

Robatkoh highland 3 years grazing prohibition period have set up and have continued, and 2014 year is an end of the 3 years. To meet the situation, regeneration plan shall be examined, under a concept that the plan shall be practically be applicable within a extent of really available resources.

From Iranian rangeland expert, a Master Plan like report was submitted for a regeneration plan(draft) which was translated and was used for the plan making reference material. Project employed Iranian expert for rangeland to conduct survey for actual state and formulated a plan for regeneration, and NRWGO

technical committee accepted it.

④ Activities of after the VAP(draft) explanation for the stakeholders

a-Up rising necessity to explain for nomads concerned

VAP (draft) explanation meeting was held. Participants were; Elders and Shoras from Robatkoh village, Tarom village and Durak Sofla village who were representatives of the land utilization right holders and also signers of the VAP and witnesses and the project experts. It was a schedule, in mind, because in the meeting encouraging remarks on the VAP contents were expressed, that the after meeting procedure would be; the representatives, the village concerned participant, took the draft back and explain for the others and get agreement,

But, in reality, the representatives expressed welcome for the VAP contents, but, so said, opposite party of disagree was appeared that the project could not complete signing process of the VAP. But wild celery sowing for their common land only was agreed, which was a component of the regeneration plan.

The project agreed by Oral base that the explanatory meeting period for nomad shall be 45 days after Nowruz, Iranian New year, March 2015, when the concerned nomad came back to Bazoft for summer season grazing.

b- Wild celery sowing

On the agreed wild celery sowing in their highland rangeland common land, the area confirmation had been done, and then necessary quantity seeds were purchased and sowing seeds have been implemented within the 4th years.

The sowing operation might result common benefit among the land right holders that opposite party on the VAP in total might agree. And NRWGO expressed their positive will that protection area management by wild celery sowing are would be supported through donation of seeds and technical guidance by NRWGO

Seeds purchase work, etc., have shared and collaborative works among Rangeland section of NRWGO, Bazoft Office and experts concerned. Supplied seeds have stored, transported to the site and sown by joint operation group consist of elder group's and 2 of cooperatives, etc.

c- Other works; sowing experimentation, survey plot setting, etc.

Preparatory works for the 5th year; design, cost estimation and materials purchase, was conducted

⑤ Preparation of Robatkoh highland rangeland management activities in the 5th year

In the 4th year, good sample study of rangeland management at two sites was conducted and actual condition survey of land right in Robatkoh high land was conducted too. Required items to be needed in making of 5th year plan are as below. Moreover these activities records are very important for an example against land right rearrangement approach

a-To develop the consensus building process on the VAP formulation including nomad for whom the project could not be completed during the 4th year

b-Propose demarcation and sub-division of boundary among tribes (family and/or family group) and clarify each of their management responsible areas

c-Promote self-help maintenance of common land conservation and sown wild celery management Activity, and consider stone fence construction support on the southern border of the area

d-For experimentation plots and permanent plots establishment, detailed design, employment of supervisor and the contract preparation works shall be kept in mind

e- Drafting of a regeneration plan toward the end of grazing period, and to have consensus among the stakeholders

3) Community development activities

Up to 2010 year, to get national land utilization permission was very rare except use for grazing and difficult except special case, because of national land not permitted to use even it were degraded, based on national law and policy. But after the proclamation of “ 2010 agriculture and natural resources production ability promotion law” status of FRWO and NRWGO have changed in the 4th year (2013) to permit production activities using permitted forest tree species on a small area which was deemed as degraded area, even if it were in forest or forest edge area of national land.

① Fruit garden establishment and technical support

The project continuously supported the fruit garden established by the project.

As first step, the JICA and NRWGO joint project expert team have consulted with the villages and the three parties agreed on additional material provision, intercropping, technical guidance and maintenance activities and conducted as follows;

a- Supplement planting

Dead seedlings planted last year were replanted this year. The seedlings were provided by JAO.

b- Intercropping

Inter cropping in the fruit garden have done for efficient use of the land and to keep income gain of the villagers concerned. From 3rd year results of intercropping, beans were selected as major crop for 4th year. The situation of intercropping in the orchard in the 4th year is as bellow.

Table 2-35 Situation of intercropping in orchards of the villages

Village/ Site	Seed(kg) ^(a)	Harvested amount (kg) ^(b)	Household usage (kg) ^(c)	Sold (kg) ^(d)	Cash (1,000rial) ^(e)	Notes
Tabarak Sofla	25	300	60	150	15,000	50kg to labors as <i>food for work</i> 40kg donated to needy people
Tarom1	15	15	15			All divided among the beneficiaries
Tarom2	15					Intercropping was not realized, due to lack of water for irrigation.
Dorak Sofla	33	214	209	5	400	Cash used in buying kitchenware.
Mazerashte	28	260	260			All divided among the beneficiaries
total	116	789	544	155	15,400	

a) Seeds for initial sowing were provided by JICA Project Team to promote farming activities in Bazoft area.

b) Difference in harvested rate is attributed to soil condition, water availability, and maintenance efficiency in each site

c) Some amount of seeds is kept for cultivation in next season.

d) In informal trading price is set by mutual agreement of seller and buyer.

e) The money was distributed among the participants based on their resource sharing (land, water, and labor).

c- Orchard technical support

Materials and equipment were given for maintenance of the orchards. The project has employed the expert introduced by JAO as an extension officer of orchard technique.

Assigned job scope of the employed extension officer include not only 5 fruit garden but also villager's fruit trees such as; present exist fruit trees in villager's home garden and newly planted fruit trees by villagers who planted after observation of the project established fruit garden. The project ordered to the extensionist as tabled schedule and work items as below.

Assigned scope of the extension officer is including not only 5 orchards but also planted fruits trees in the home gardens and newly planted after the establishment by project.

Orchard maintenance schedule is below, extension officer worked based on this schedule.

Table2-36 Orchard maintenance schedule

Activities	Months										
	Esfand 15	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Sharivar	Mehr	Aban	Azar 19	
Provision and distribution of cutting											
Pest and disease control											
Intercrop cultivation											
Fertilizer application for intercrop											
Weeding											
Irrigation											
Harvesting											
Grafting											
Pruning											
Fertilizer application for fruit trees											
Support for marketing											
Purchasing of seed and materials intercrop											
Purchasing of seed for seedling production											

※ December to February snow period, so no activity.

d- Marketing support

Intercropping species were selected just tomato and beans, so especially in Tabarak Sofla and Mazerashte village, their yield were enough quantities for sale. The poster was made for promotion to be able to access buyer to producers directly, put them on attractive place in Bazoft and distributed concerned persons as well. Trial calculation of income and expenditure of the fruit garden: The project made a trial calculation on maintenance cost, harvest quantities forecast and expected income.

② Seedlings production activities and training of organic fertilizer making

The activities have started in 3 November 2013, which include fruit trees, vegetables, wild vegetables, seedlings for forest and for ornamental purpose and targeted home use and for seedlings sale. After needs survey conducted by CFs, many villagers have joined in the activities.

Table 2-37 Outline of seedling production and compost making

Village	Participants	CF
Gazestan	Male 26, Female 18	Ms.Sima Paehan, Mr.Reza Behzadi
Tabarak Sofla	Male 10, Female 8	Ms.Soghra Khodaverdi, Mr.Alidad Khodaverdi

Tarom	Total 9	Ms. Bigom Mohebi
Durak Sofla upside	Male 22, Female 13	Ms.Fariba Ahmadi, Mr.Halil Ahmadi
Durak Sofla downside	Total 25	Ms.Ahsame Ghasemi, Mr.Sorkhab Mohebi
Mazerashte	Male 26, Female 14	Ms. Khodabas Eidivandi, Mr.Gholi Eidivandi

The project has delivered and contributed seeds and tools for the training. Delivered fruit and forest species seeds were peach, walnut, apricot, almond, cherry, wild almond, shoot of grape, pomegranate, fig and rose, wild vegetables seeds of wild celery, etc., and seeds of various vegetables. And 2-3 set of such tools as plastic-pot, watering can, grafting knife, etc., to each village, for training purpose also were delivered.

Because of fruit tree seedlings were high demand, the project ordered the employed extension officer to support of fruits tree seedling. This extension officer has enough experience on agriculture, the project asked to do technical support on home garden and seedling production especially for women. Training on pest and disease control was effective. Manure making training was held in several places for seedling production participants, this activity can let them aware the sustainable agriculture.

In the evaluation WS in November 2013, it reveal that seedlings have used for own home or donated for relatives and friends. This year's seedlings production quantities were not so many as first attempt, and to obtain excellent branch for grafting and seeds for grafting base to lift up production quality should be a matter of concern.

③ Beekeeping training

JAO sent a lecturer to Mazerashte village and beekeeping training was held in May. After that, agriculture training center sent a lecturer to Gazestan village in September and October, beekeeping training was held. This lecturer is more experienced on field training. Because of that he knows the procedure about training implementation, request side can manage effectively.

Certificate for Gazestan village were already submitted and trainees in Mazerashte village were expected to start and to expand scale of the beekeeping operation. They have a hope to apply for Agricultural bank loan, the possibilities have told by the trainee and by MOJA staff that which is available when there are the certificate of the training.

It was get clear through TVTO collaboration activities, the project can support up to propose for Bank which of organization inspect and screen applications, but impossible to earn responsibility to force disburse the bank loan. Though it were so, villagers are tend to think unconsciously believe that the project may accomplish the bank loan issues. Available scope of support works by the project concerning the bank loan application shall be understood by villagers.

A study whether it is available or not to build a system in Gazestan village, applying microcredit system and with no obedience for Agricultural Bank, has initiated.

⑤ Rose garden establishment

In the 4th year Tabarak Sofla village has proposed for the project to establish operation using rose species in degraded national forest land and establishing rose garden. The project start support activities against the proposal obtaining NRWGO's consent, because the work can be developed as one of excellent example to demonstrate natural resources utilized Community Development activity under conditions of; from soil conservation technical aspect, perennial crops planting area is better than keep bare land, and rose

species are permissible to plant inside national forest lands.

Mr. Khodaverdi, CF of forest and rangeland, have got guidance from NRWGO and drafted a plan of rose garden establishment and which has discussed in technical committee of NRWGO, and the committee accepted it with reduction of the area. The project supplied a part of materials and tools and seedlings of rose.

The activity would be monitored after the 5th year in order to achieve success for an excellent example of national land lease operation.

⑥ Wild celery activity

In the 4th year forest and rangeland group, especially highland rangeland sub-group, have sown wild celery in a large operation area. Community Development group have provided, using some part of the seeds, to sow it in home garden and individual land. Sowing method training for villagers has already been done until last year.

The project experts visited and surveyed on a skillful wild vegetable cultivation farmer in Kiar district. The farmer has already sown seeds in hill not so steep slope. There were medicinal plant and wild vegetables specific nursery was in his home garden, applying irrigation, fertilizer application, etc., for purpose of product fast growth seedlings for mountainous planting site. And because the forms of seedlings is stump seedling that transportation is easy and that, if survival rate and growth of the year after, it is assumed that such places like Bazoft, stump seedlings are far more effective comparatively to seeds sowing. The project have got 50 stump seedlings from the farmer and which were planted in home garden of Gazestan village. Because of this kind of research and survey were not conducted in Bazoft that there is needs to verify it. Other than that germination of potted seedling, which have sown in winter season were good, and it was decided to monitor survey for what kind of growth pattern would be observed.

4) Other work

① Species potential survey in Bazoft

The project initiated introduction of new species and varieties which may have income generation potential.

Fieldworks to find out species and species sample procurement, which of species may have possibility to harvest in Bazoft area, were done in three of Zagros Provinces; Khuzestan, Esfahan, Kermanshah.

With cooperation of NRWGO of each province, suitable plants were identified and samples brought to Bazoft for test planting in villages. These include olive, mulberry, rose, acacia, and rosemary, etc. Upon success and propagation, such plants can become a new source of income for villagers.

② Microcredit system introduction for women group toward post training business operation development

To activate sewing license, which were obtained through sewing training in the 2nd to 3rd year, trial operation has initiated since 4th year.

a-Survey of other microcredit well managed cases

An information exchange meeting with women's group was held in May 2013 during a site visit of The World Bank project in Mazandaran and have got information of microcredit system introduction and management method.

Then, JAO introduced on going cases of YanCheshme village and Abasabad village, Ardal district,

Chaharmahal-va-Bakhtiari province has been observed in August. Practical implementation method has got from the villagers and Ms. Asgari, JAO staff. The project have, continuously, got micro-credit concerned cooperation with her.

b-Explanatory meeting in village concerned

In the first meeting, advantage and disadvantage of microcredit and implementation procedure were explained. Based on the 1st meeting, CF and women discussed and gathered participants, 11 persons are joined. They work on based on the sewing activity groups, although it is informed that microcredit activities should allow many activities by many ladies. Explanation meetings on microcredit were held in Mazerashte and Gazestan in December 2013, so many women never seen until now gathered, it should be concerned how to implement in future.

c-WS for dressmaking and the operation start

The members have meetings, leader, management board and inspector were decided, and contents of activities were discussed. 2 groups were formulated among 11 members and sewing workshop activities were being started. The project had bought sewing machines and the project lent it. 2 groups borrowed it from the credit box with no interest rate, as a special case. This system was accepted and refund by the all member. It was confirmed by the members.

The project suggested to hurry up the WS open, not to lose opportunity of school uniform demand increase, a timing of before new school term; August and September.

The project employed 2 lecturers to guide them on; procurement of materials, selling method, cost calculation method, workshop management method, publicity, record and commercial goods development.

d-Cost analysis and refund system

Income and expenditure calculation were conducted with the participated members in November. Necessary accumulated cost and pricing method were already learned in OJT base from the teachers and the project request which of total operational amount calculation. As the result, based on the income and expenditure calculation, they have benefit except initial investment if amount of sales are stable, the sewing machine initial cost seemed refundable. But because of large sum of demand as school uniform is not much expected and it was estimated that order made product from one-time buyer targeted income are not enough for WS management. The group members were struggling to get customers.

5) Procurement for forest and rangeland management activity

Following 3rd year, local experts and field supervisor have been employed. The project has procured the materials for the activities in Bazoft as much as possible. Other than above, the project has procured the materials mainly in Shahrekord. The labors for each activity have been procured from the local people to understand this project through the recommendation by representative of village.

(3) Monitor, evaluate and obtain feedback on activities by VAP participants

In November 2013, satisfaction survey for the project activities by villagers were conducted to evaluate VAP and for feedback to next action. The average score for each activity were 16-18 out of 20, seemed satisfactory.

Simple interview for 4 person per each village, including elder man and woman, young man and

woman, have applied to survey scope of knowledge and understanding on the project activities. 7-9 questions were applied on acquisition of knowledge, knowledge utilization and transfer, realized yield and benefit, continuation for 4 activities, guardsman for protection area, regeneration monitoring, orchard techniques and seedlings production. Among them, ‘guardsmen for protection area’ is strongly understand and necessity of protection area was also understood. On regeneration monitoring, because this activities are not asking positive participation for villagers so that visibility was low. But most interviewee respond that vegetation are recovering and which of vegetation recovery will benefit for villagers. And all of them expressed their hope to do monitoring by themselves, which may show growing interest. On orchard technique, learned techniques from extension officer were applied on their field, there are many person who had interest on the orchard by watching the activities which the project had been done. Regarding seedling production, additional expansion by themselves are not observed except project inputs . The seedlings which had been produced in this activity is served self-use.

The project has understood that the result of scorings and interviews are kind of evaluation methods to have fundamental information concerning some kind of villager’s conceptual acquaintance, which were vaguely understood but not so clear for the project. The evaluation contents by villagers have meaning under some conditions. Positive aspect on the application of the methods were; through the scoring work, understandings that the project have conducted various activities may widely be spread and may create motivation to join in the project activities. And interviews were conducted in open space that every participants could hear the contents of interviews and the information on the project activities may also deepened in the listeners. It is dare to be said that the project could transfer messages like “the project also is conducting livelihood improvement activities within the scope of forest and rangeland conservation and recovery project” and “stressing importance of forest and rangeland conservation” which are not easy to express during ordinary activities scene. Thus, this evaluation activities affected the participants was mainly positive.

(4) Preparation of Guidelines for Participatory Forest and Rangeland Management

1) Objective of the Guidelines

A guidelines (draft) was prepared, aiming NRWGO user, based on wide range of knowledge and experiences, which have been acquired through participatory forest and rangeland management activities in Bazoft area, collaborative project activities with JICA experts and NRWGO counterparts.

2) Contents of the guidelines

Introduction
Chapter 1 Outline of the Guidelines
Chapter 2 Basic Concept of People Participation of JICA Project
Chapter 3 Methodology
Chapter 4 Method to survey present situation of the area
Chapter 5 VAP(Village Action Plan) making
Chapter 6 Planning and Implementation of Forest and Rangeland Activities
Chapter 7 Planning and Implementation of Community Development Activities
Chapter 8 Capacity Development / Training
Chapter 9 Implementation structure of Project
Chapter 10 Monitoring and evaluation

2.2.4.5 Achieved results of the 5th year

(1) Preparation of VAP for participation forest and rangeland management activities based on present condition of target villages

In the review workshops we made calendars of the activities which we had done in 5th year same as 4th year, and heard the opinions from the participants in each village in May 2014. It seemed that understanding level has been increasing because of repetition of the same work from last year. The activity calendars were gathered by participants and 5 villages Joint VAP seminar was held. This activity purpose was presentation OJT for CF and exchange opinions among villages same as last year. For continuing the activities with local government by CF themselves in the future, understanding of villagers needs by CF themselves and explained and guided them to making VAPs which can be implemented in the project scheme. Additionally, some supports were given by extension officer employed by the project after the workshop, submitted VAPs were confirmed and continue to the implementation.

For some supports after the project end, we held “from PRA to VAP training” targeted to CF in November 2014 in Bazoft office, lecturer was Mr. Rezazadeh. Lecture of “from PRA to VAP” and exercise of making VAP had been done in the training. After the training, correction and collection of VAP had been done through the extension officer employed by the project,

Forest and rangeland group WS in each village was held to talk and decide about the content of Village Action Plan among the villagers. 5th year VAP of forest and rangeland management activity was prepared and signed between villagers and JICA project.

(2) Implementation of VAP

1) Forest and rangeland management activity

① Maintenance of protected area

In each protected area vegetative restoration showed apparent recovery and good maintenance was carried out under the guard control.

Table2-38 Result of forest and rangeland activity (2014)

Activity	Contents
Patrol	The village is to carry out protection management independently till December to February about guard of protected area. This year when the condition of protected area was confirmed in May, good growth of wild celery and regeneration of other vegetation was observed. On the other hand if it guesses from the opinion of the local people who participated in joint WS in the village, It seems that local people have protected independently the whole high land rangeland include the protected area which the project set on the left bank of Bazoft river from a Mazerashte village to a Tarom village. In the joint workshop in a village, there have been a lot of complaints against protection from the nomad of multi-number-of-heads breeding who comes from Khuzestan province, Moreover, the problem that there are those who continue pasturage without hearing the leaving demand by a guard was reported again.
Fence construction	When the fence was checked, the repairing work of fence in Gazestan village and Tarom village was not necessary to repair.
Signboard	Signboard was set up to show the location and other contents in each villges.In some

	<p>protection area, there were places where the display of the signboard was destroyed, and repairing work will be conducted next year.</p> <p>Signboard of protected area which set up three years ago only remains the iron frame according to a mischief by children ,sunlight and rainstorms. The content of the map etc. which were being stuck had separated. Therefore, the method of drawing on signboard with paint directly and the character which NRWGO are usually using was adapted..</p>
Monitoring work of oak regeneration	<p>The study was started by employing local expert same as last year to monitor regeneration in protected area. Litter layer in the soil stimulated and developed by soil conservation. On the other hand, there were small number of seedlings from seeds which was germinated last year. About 2 or 3 years seedling there are seedlings which grow shoots after once dried. basal diameter of seedling grow well and height of seedling still grow slowly. Near the candidate site of permanent plot for rangeland management at boundary of Mazerashte village and Algi village, it was observed that height of oak is 1 m above. Such a tree is not seen at other places.</p> <p>Before JICA project decided this site as protected area, NRWGO authorized this site as protected area by requirement of local people. So this site has been protected as a protected area totally for 7 years. Site condition of this area developing soil layer and good water condition. Existence of many oak seedling by natural regeneration is that this site is very valuable area as successful case of natural regeneration and biodiversity by protect measure..</p>
Sowing of Medicinal plat seeds	<p>Wild celery was good germinated condition in Robatkoh highland rangeland. But it was observed that number of wild celery in one planting spot was dense according to sawing large number of seeds. JICA experts warned villagers it that sawing method should be improved.</p>

②Planting in public land

When Natural Resource Week in spring started , tree seedlings were planted together with the teachers and the student in the schoolyard of the elementary school in Tarom village(2012), Gazestan village(2012) and Tabarak Sofla village(2013). There was plan of planting seedlings for other two villages. But the planting seedlings were not conducted for the reason of land for planting and coordination with teachers.

③Check dam

The check dam constructed in Dourak sofla village (2011) was received the erosion at side of check dam by the sudden heavy rain in July 2014. So the land ownership and repairing method about repairing work was consulted with village and CP. The users of the land where galley occurred were identified, and discussion was done with the representative of them. The check dam consultation was conducted after preparation of VAP and conclusion with the condition of that natural stone was used for pile of stone hence, cost of construction (labor fee and transportation cost of stone) was paid by the project and construction work and account control was managed by the people.

From the view point of watershed management Mr. Rezazadeh, C/P of Community Development, responsibility of watershed management department NRWGO instructed and inspected. And from the village Mr. Ahmadi as supervisor engaged in repairing work by villagers.

It was found that this case could minimize the overhead costs for supervisor side, NRWGO, and days for supervision as well, so that it was a good test case that more NRWGO construction cost could help bring income to the villagers by villager's initiatives.

2) Highland Rangeland Regeneration Activity

① Highland Rangeland Regeneration Study

Highland Rangeland Regeneration Study was positioned as preparatory meeting to explain and agree VAP to nomad. The explanation and exchange of view to each representative of big family groups were conducted about result of germinated situation of wild celery, confirmation of site for stone border wall to protect invasion of robbers, cost sharing, permanent plot establishment, etc.

② Nomad meeting

After that Nomad meeting was held, and argued much on two permanent plots establishment activity among all activities of VAP. Opinions that, if a range/boarder of land right in/out Mohamadi family were made clear, participants agreed, but, if not, participants disagree were expressed. As a result, VAP for all Robatkoh highlands have not been agreed. As a Next step, through additional explanation and process of opinions collection from land right holders, a permanent plot to establish in the land belong to Mohamadi family was stopped. And another permanent plot was established in a land belongs to Kazumi family who has interesting in this activity.

The 2nd permanent plot candidate location was confirmed about the suitability as experiment area from the view point of natural condition, and, together with technical deputy, a JICA expert, highland rangeland in charge, met with representative of Algi village, close to the permanent plot candidate, and existence of social problem; are there land right issues, or not, were investigated and confirmed. Having answer that “Target area for the permanent plot belongs to Edivandi family and has no problem on the customary right.”, then, confirmation paper was prepared and signed.

③ Sub contract of construction work for permanent plot in Robatkoh village

JICA project requested cost estimation for 3 organizations, as; a company, and a cooperative, who have ability to do contract work at the field, and a shora of Tarom village, who has implementation system. Finally, the cost estimation was submitted only from accompany represented by Mr. Mohammadi Reza Kazemi, native from Robatkoh and being like CF.

④ Implementation of inspection work

After contract of an agreement for permanent experimental plot construction, inspection works such as delivery of material, instruction of construction place and designed construction methods were implemented. To confirm the conveyance of materials and to instruct place of permanent plot, joint supervisor; the expert, JICA, and Mr. Rezazadeh, NRWGO, and the contractor went to the experimental site, and sticks were piled on the corner of the 100m x 100m plot.

⑤ Occurrence of stones thrown incident

Stones thrown incident was happened on the way to go to the site to instruct the setting method of fence pole to pile the stick around 70mx70m inside 100mx100m plot. The project concerned person working could arrive at the construction site without injury, finished the works and went back down to the village.

After the incident JICA Iran office ordered for JICA experts not to enter into Bazoft area, and to stop the Permanent Plot Setting (PPS) work in Robatkoh highland rangeland. And then, the Project ordered to the contractor to stop the work and informed to the contractor on the contract revision of to enable of achieved base payment until the construct works have finished.

⑥ Completion of the work

The Contractor, ordered to stop the work, also was ordered to visit the project office to explain the work condition/performance with photos, explained that the work were almost finished. NRWGO staff, Joint work inspector, went to the site on 10 November and confirmed the work progress. The confirmed result was that fence setting work was finished completely and Anker setting work, only, still remained.

JICA project paid cost against 98% of the total work on the basis of the confirmed result by the field survey report and photos and the revised contract. The remained Anker construction work was implemented by contractor voluntarily. But it was felt that NRWGO as public office needs inspection of the work, NRWGO conducted guidance on the Anker works for the contractor.

3) Collaboration with NRWGO forest section

JICA project received application to support implementation of fig cultivation of reforestation project in national land as much as possible from Mr. Jajaeri, forest section chief of NRWGO, last year. JICA Project did not accept the application this year as JICA Project has not plan of fig cultivation, however it was accepted in the 5th year. The reasons which JICA project judged are: 1) submit the VAP prepared by villagers including fig cultivation, 2) need to integrate VAP activity with NRWGO for sustainable project for the future.

In the case of new support to VAP in 2014 by JICA project, the output of project cannot confirm and after 5 years. The input is impossible from JICA. So it is dispensable that villagers and NRWGO input additionally. For the reason, JICA project combine NRWGO reforestation project, willing to reforestation project of national level, with contents VAP prepared by villagers. Accompanying that coordination work of implementation size was conducted.

According to the VAP Implementation area can be accepted by landowner area from 1ha to 5ha. but forest section of NRWGO intended that: 1) importance of area from the view point of National project, 2) necessity of about 10ha of united area at the view point of work efficiency., 3) need to observe NRWGO accounting regulation for project implementation. For that reason VAP was agreed by holding the meeting to villagers with CP and VAP was started to implement. The specific VAP was proposed 5ha of Mazerashte village, 1ha of Durak Sofla village and 60ha of Tabarak Sofla village. at the result of meeting for implementation and field verification by staff of forest section of NRWGO. 20ha of Mazerashte village and 30ha of Tabarak Sofla village was agreed by villagers. JICA project withdrew the support for Durak Sofla village by this scheme. Although it was exceptional case, project area was decided to set up about 10ha near previous NRWGO office in Telud village which can be easy to agree with land owner to reach the area to be necessary by forest section and was easy to manage by NRWGO Bazoft office. Collaboration project between NRWGO forest section and VAP by villagers was inter-collaboration project which community development group was planning the fig trial cultivation.

Concerning the Law of utilization and conservation of natural resource, article 3, which is the basis of act for NRWGO ordinary work, negotiation with villagers to acceptance of this project was reached in VAP contract article in the manner of utilization rule. In addition VAP form was changed to letter intended to get approval of decision with Director of NRWGO, Representative village, Representative project and staff of forest office were engaged in field work and coordination between NRWGO, forest section and villages.

4) Community development activities

① Orchard establishment/ maintenance

Works for establishing the orchard started in the 2nd year, and some villages started to sell peaches produced in the orchard in the 5th year. The seminar on orchard management strategy was held for orchard CF and active persons who had adopted orchard development. At the workshop, the villages which could sell peaches gave reports on the results of fruits production and sales (cost-benefit) and the information was shared among the participants.

a- Monitoring the orchard management activities

The orchards were monitored in order to update their status and problems were identified. In order to solve those problems, guidance was given to the managers including the CFs. In particular, damages by diseases and pests were reported, and they were advised to consult the JAO. Besides those problems, it was confirmed that the trees grow well in every orchard.

b- Seminar on strategies on fruit tree management

The seminar was held on October 15, 2014 to review the orchard activities implemented in the past 5 years and discuss principles of future activities. There were 35 participants at the seminar; among them were the CFs, those who are interested in the orchard activities and relevant personnel of the agricultural department. At the end of this seminar, the certificate was given to the participants for participating in the training on fruit tree management technique along with OJT for daily care of the fruit trees provided by the JICA project. It was expected by this to motivate the participants more. Communication of 5 villages improved by holding this seminar.

c- Topics of discussion at the seminar

1) benefit gained from orchards; 2) marketing; 3) maintenance and management of orchards

d- Issues raised by the participants

1) expansion of existing orchards; 2) development of new orchards; 3) needs of pump irrigation

② Technical support for orchard management

Taking into account the sustainability in the final year of project implementation, experts recommended by Koohrang office of the JAO were employed as extension staff for orchard from June to November 2014 for supporting rural development activities. Technical guidance was conducted. And guidance on orchard management technique including measures to mitigate damages by diseases and pests, growing beans, making compost, fertilizing and pruning were provided and monitoring of orchards were carried out. Growing beans were highly appreciated; women in particular actively participated in this activity since the beans were mainly grown for self-consumption. On the other hand, there was unusual severe rain fall in July 2015 and damages on growing beans and vegetables by sediment runoff were reported on some fields.

Because the dissemination section of NRWGO could not cope with dissemination activities in villages, orchard expert was employed whose task was preparation of VAP, etc., which are usually done by the extension staff of NRWGO.

③ Training on beekeeping

Training on beekeeping was provided in September at three sites of Tabarak Sofla village, Taronm village and Durak Sofla village, in cooperation with the agricultural training center. The lecture fee (base fee) was paid by the training center and costs of teaching materials, transportations and overtime allowance of the lecturer were paid by the project. The lecturer who also lectured in the previous year has lots of experience of training in villages and was highly appreciated by the villagers. Demand for training

on beekeeping is high and many women participated in the training. The participants who received the certificate of training had started beekeeping. The villagers which participated in the training in the previous year have started to practice on making new bees groups from old bee group, and some of the beekeepers have increased bee hives.

④ Introducing the microcredit system for women

Tabarak Sofla village that has adopted the revolving fund system for helping each other among the villagers has gained a little benefit from producing tailor-made clothes and started returning the money borrowed for buying a sewing machine. The project provided an advice on business activities for tailor-made production of the school uniforms, but it was still difficult for the villagers to practice business activities by themselves.

In the microcredit boxes established in two groups of Gazestan village with guidance of female extension staff of JAO, the participants continue saving the fund. It was said that the microcredit boxes started to loan in April 2015. Furthermore, it is also said that NRWGO provided donation to the two microcredit box activities simultaneously.

⑤ Maintenance and management of agroforestry

In the agroforestry site established in the 4th year in Gazestan village, maintenance and management activities were implemented partially as practice for staff of NRWGO. Terracing activities were supervised by Mr. Rezazadeh and planting fruit trees and building fences were supervised by Mr. Mardanian. Regarding the expense of implementation, fruit tree seedlings were provided for free by JAO with arrangement made by NRWGO. Regarding the costs of materials and personnel associated with building fences and terraces, 100% of the material cost of fences and 20% of the personnel cost were paid by the project and 80% of the personnel cost was paid by the villagers in accordance with the VAP that the beneficiaries (villagers), NRWGO and the project agreed. NRWGO supervised all the activities.

The pump of Gazestan village broke down in September 2014. Although the pump was repaired by the villagers paying its cost, the pump soon broke down again and it is not repaired thereafter. As a result, the village experiences water shortage and it is concerned that survival rate of the fruit tree seedlings will decline.

⑥ Maintenance and management of the rose garden

In the 4th year the project provided support on the seedlings, materials and equipment in order to make a case of national land leasing project by NRWGO. Since the pipe from the water source was not long enough, it was worried in the 5th year that survival rate of the roses would decline in the dry season in which irrigation was needed. Although the project was supposed to support the initial investment only and the villagers and NRWGO ought to have solved the problem, the project supported them coping with the urgent situation on survival of the seedlings. Afterward, the withering of roses decreased and high survival rate was kept in April 2015.

⑦ Searching commercial crops

Considering the request of villagers, demonstration plots for figs and saffron were developed in the 5th year. Regarding the saffron, the bulbs purchased from Mashhad were planted in September 2014 and the first harvest was made in late October 2015 for self-consumption. Harvest in the next year and thereafter

will be affected by fertility of the land and therefore, management of the land will be important.

Species of Somag and Figs plantation were implemented a part of the forest enrichment project.

⑧ Activities for seedling production

After the training provided in November 2014 on preparation of the VAP, the VAP on seedling production was submitted by the villagers. The VAP on seedling production has been implemented in December. The experienced orchard expert employed in the last year assisted the implementation. The villagers requested for walnut, peach, almond (Mamro variety) and wild almond. However, the expert proposed that the species harvestable without grafting be preferable and kinds of apricots were also introduced. Walnut seeds were eaten by crows and porcupines in some nurseries. According to the expert, the villagers acquired skills for seedling production and planting, and the next step as orchard farms would be to acquire tending skills such as grafting and layering. Planting the fruit trees and tending activities in the target area seemed to be stabilized by implementation of project activities for three years associated with orchard management. It is hereafter necessary to study dissemination of the orchard in Bazoft with JAO.

⑨ Growing figs in the forest rehabilitation project

(Refer 2.2.4.5 (2) Implementation of VAP, 3) Collaboration with NRWGO forest section)

The forest office of NRWGO requested in October 2014 for support on production of figs to be dried that was to be introduced as a part of the forest enrichment project in the Bazoft area. It was treated as a trial to ensure sustainability of the project activities in combination of NRWGO rules and the project style. Since it was busy season for the Iranian counterparts, personnel of the forest office, forest and rangeland counterparts, community development counterparts and the villages cooperated to execute administrative works to make an agreement with the villagers. Thereafter, the community development counterparts worked on guidance for planting, tending and management methods of seedlings and procurement of seedlings.

15,000 seedlings of figs not requiring irrigation were procured in Estahban, Fars province. For concluding the VAP, village meeting was held with support of Mr. Karimzadeh and Mr. Rezazadeh, taking advantage of their experiences on project activities treating problems on complex land use. The land identified finally for planting includes 25 ha in Mazerashte village, 30 ha in Tabarak Sofla village and 10 ha in Telurd town. Surplus seedlings were used to produce fig seedlings in the NRWGO nursery. Although Telurd town is not one of the target villages of the project, the town was selected by the forest office taking into consideration its suitability for planting, possibility of being able to make an agreement with the villagers and appropriateness to be a model. Use of the seedlings procured by the project was then accepted as a part of OJT for the forest office.

Since this proposal is for a trial forest enrichment project dealing fig production on assumption that the national land can be leased and the NRWGO becomes responsible for its maintenance and management, it was upgraded so that the VAP will be signed by the director and the forest office.

⑩ Activities on wild celery

Stamp seedlings of an innovative farmer were tested on their growth in Kiar district in cooperation with the CFs of Gazestan village. Since the stamp seedlings of wild celery grew well, however, those were stolen and their growth could not be measured. After the robbery, the CFs made the wall higher so that

other celeries could be protected.

5) Procurement for forest and rangeland management activity

Following 4th year, local experts and field supervisor have been employed. The project has procured the materials for the activities in Bazoft as much as possible. Other than above, the project has procured the materials mainly in Shahrekord. The labors for each activity have been procured from the local people to understand this project through the recommendation by representative of village.

(3) Monitoring the effect of CD for the villagers, evaluation of VAP and feedback

While the survey to identify how much the villagers are satisfied and the interview survey were carried out in each village on November 25 and 26, 2014, results of implementation of the action plan were also shared. Moreover, during the surveys, data as indicators for the final evaluation were collected as well.

Table2-39 The number of interviewees for the survey
to identify how much the villagers are satisfied with the project activities

	Men	Women	Total
Tabarak Sofla Village	7 (59, 30 ,40 ,25 ,38 ,39 ,60)	3 (40, 24, 23)	10
Tarom Village	1 (58)	1 (32)	2
Dural Sofla Village	7 (66,56,26,32,40,70,66)	2 (38, 33)	9
Mazerashte Village	8 (65, 38, 47, 45, 34, 61, 43, 28)	2 (37, 64)	10
Gazestan Village	6 (30, 5, 38, 40, 60, 60)	5 (29, 15, 30, 42, 38)	11
Total	29	13	42

() The figures bracketed indicate the age.

① activities implemented by the JICA project benefited your life

41 out of 42 interviewees answered “yes”.

Table 2-40 Results of interview

Positive comments	<ul style="list-style-type: none"> –I received an income as a Forest Guards. –The income increased by dressmaking. –Planting medicinal plants will be a source income. –If the project activities had not been carried out, the acorns as one of the income sources at present could have been exhausted. –I could learn importance of the forests. –Conservation itself of forests and rangeland is benefit.
Negative comments	<ul style="list-style-type: none"> –There was benefit for the land but no personal benefit. –The project activities also caused inconvenience.
Special remarks	<ul style="list-style-type: none"> –Peaches harvested in the orchards established by the project and those established spontaneously by the villagers getting influenced by the project could be sold from 2014. –To the question about whether they have received an income from dressmaking, 10 out of the 13 asked women answered they made Chadr, traditional dress, skirts, pillowcases, kitchen materials, trousers, children’s clothes and Trousseau for the orders received from

	<p>their relatives or villagers within a month, and seven out of them answered they received an income for the work done.</p> <p>– 10 villagers practice beekeeping (6 of them started beekeeping before the project provided training). Each of them produces 30 – 150 kg of honey which are partially sold (honey can be sold for 200,000 – 500,000rial/ kg).</p>
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② Desire of the villagers to continue the VAP

The villagers answered questions on the status of their activities and whether they want to continue the village activities after completion of the project.

a- Village activities that the villagers continue without support of the project

The project supported home garden activities in the 2nd and 3rd years by providing seeds and technical guidance. Although the seeds were not provided in the 4th year, 32 villagers including those who received the seeds in the year before practice home garden activities spontaneously. 12 out of them buy the seeds by themselves and grow crops.

As an impact of the project developing model orchards, small orchards have been developed in the five target villages. Specifically, 2 villagers in TabarakSofla village, 6 villagers in Durak Sofla village, 8 villagers in Gazestan village seem to have started developing orchards.

8 out of 10 villagers who have started beekeeping consider expanding their business.

b- Village activities considered to continue

18 out of the 32 villagers who have not started bee keeping consider practicing beekeeping if they can receive government support or loan from a bank.

c- Forests and grassland conservation activities that can be carried out by the villagers

To the question about whether a villager can develop a check dam by himself or herself, 25 villagers answered they can develop a check dam. Among them, 13 villagers mentioned the financial support as a condition of developing a check dam. It is therefore considered that the villagers found themselves that they can develop a check dam of dry masonry owing to their experiences of seeing the check dam developed by the project and speaking with those who built the dam and the training provided by the project. However, awareness of the villagers to pay the cost of building the dam has yet to arise because they have not been able to appreciate the effect of soil conservation on maintaining the crop productivity as an actual benefit.

To the question on whether a villager wants to convert growing wheat and barley on rainwater to growing wild celery, 38 villagers answered “yes”.

③ Importance of forest conservation for the villagers

To the multiple choice question on why a villager protects forests (multiple answers accepted), 40 villagers answered all of the choices (maintaining water yield, using forests as picnic sites, producing forest products, protecting forests as they are, mitigating soil erosion, etc.) as reasons to protect forests. Other answers include getting livestock feed, grazing and maintaining wildlife habitats as purposes of forest protection. Moreover, wild celery, wild almond, medicinal plants, etc. were answered as forest products. It is found from this result that various purposes of forest protection are considered by the villagers.

Furthermore, it is estimated that rehabilitation of lower layer vegetation in the protection area set up by the project proved display effect of the protection area in the village and awareness of the villagers further increased.

④ Opinions of the villagers on the project activities and conservation of forests and rangeland

To the question about whether the activities implemented by the JICA project are good for forests and grassland management, the all asked villagers answered “yes”. It is considered employment of the guards, soil conservation activities, planting medicinal plants and building knowledge by various trainings in particular were led to forests and rangeland management. To the question about which particular activities became an incentive to conserve forests and rangeland (multiple answered accepted), 21 villagers answered the activity to set up the protection area (employment of the guards, building the fence, etc.), 19 villagers answered the trainings, 16 villagers answered sawing wild celery and medicinal plant seeds and 6 villagers answered building a check dam. As for the contents of trainings prepared for the purpose of forest and range management, five villagers answered beekeeping that was the majority.

Furthermore, some villagers answered that they have been asked about the project activities by neighboring villages and it seems that the neighboring villages are interested in the project.

⑤ Importance of the CFs for the villagers.

All of the asked villagers answered “yes” to the question about whether the role of CFs is important for the project activities. The CF was recognized important as a liaison between the villages and the administration and information provider for the villages.

(4) Preparation of guidelines of forest and rangeland management

On the basis of comments from CP about draft guidelines, Japanese and Iranian experts organized several meetings to amend the draft guideline. In January 2015 Workshop for Guidelines of the participatory forest and rangeland management was held with attendance of Project Director, Mr. Garshasbi and Project Deputy Director, Mr. Aghighi at 28th January. Deputy Director of NRWGO in Karoon watershed and Zagros mountain area were invited. The deputy of each province commented the experience about participatory forest and rangeland and pointed out gap between existing regulation and participatory project and necessity of collaboration of other organization concerned for project. Furthermore they pointed out necessity of amendment of draft guidelines to extend other area.

2.2.4.6 Achieved results of the extension phase

(1) Preparation of VAP for participation forest and rangeland management activities based on present condition of target villages

The concept of the exit strategy used for the JICA Project is to clarify the exit (future course) for the implementation of a sustainable project and is also a process to change the method and contents of the strategy as needed according to the implementation status of the established exit strategy (how to get there).

Moreover, the exit strategy is an effective way to achieve outputs because the Project can be implemented by the predetermined time of exit, like other standard projects.

In the extension phase, after consideration and discussion with the Iranian side about the exit strategy to be implemented during this period to assure sustainability of the forest and rangeland management activities and village development activities that had been carried out in the pilot villages in Bazoft, the exit

(future course) and exit strategy (how to get there) for each of the following activities were clarified.

- 1) Activities in protected areas in national land,
- 2) Activities that are not related to land or activities in private land (conditions outside protected areas)

Table 2-41 Exit and exit strategy of project activities of protected area in five targeted village

What is expected for achievement on going and after extension phase of project?= Exit	What should JICA project carry out to increase the feasibility of exit?=Exit strategy
<ol style="list-style-type: none"> 1) Local people also protect the protected area without paying guardsman 2) Local people will continue the forest and rangeland management activities (except monitoring plots) which have been conducted during the project. 	<ol style="list-style-type: none"> 1) The policy of NRWGO makes local people understand firmly having changed in the direction that cultivation of commercial tree species, medicinal plants and grasses in the protected area in a national land. 2) Visiting 5 pilot villages in Bazoft by NRWGO staffs (including local organizations) for increasing trust of local people to NRWGO even if absence of Japanese experts 3) On the basis of meeting with local people, Cultivation of commercial species and also medicinal plants will be implemented on a condition to conserve the planting site by local people after finishing extension phase,. And including such activities VAP will be formulated and implemented for extension phase by NRWGO initiative. 4) To start the process leasing national lands which local people cultivate commercial tree species and medicinal plants by request of local people. 5) To determine and implement the share (percentage) of paying guardsman fee by discussions between NRWGO and local people corresponding to following conditions <ul style="list-style-type: none"> ➤ Village where the protection has been continued in the protected area even now ➤ Village which has agreed that local people side burden increases more than former ➤ Village which has agreed to protect a protected area even if there was no payment after the end of extension phase. 6) CFs and local people of other pilot villages promote motivation through visiting in the pilot village where activity is sustainable.

<p>3) Regeneration monitoring sites which set up by NRWGO and local people have been maintained appropriately</p>	<p>7) Before and after national land lease , NRWGO and local people manage M&E (Monitoring and Evaluation) appropriately together about the cultivation activities of commercial tree species, medicinal plant, etc.</p> <p>8) Forest section conducts forest regeneration monitoring system in protected area with cooperation of local people. The organization in which the forest section monitors continuously will be established with backing of a budget.</p> <p>9) Rangeland section conducts rangeland regeneration monitoring system in protected area with cooperation of local people. The organization in which the rangeland section monitors continuously will be established with backing of a budget.</p> <p>10) The use of tree (mainly oak) for local people will be examined.</p>
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Table 2-42 Activities which are not related to land or private land (outside protected area)/activities national land and private land

What is expected for achievement on going and after extension phase of project?= Exit	What should JICA project carry out to increase the feasibility of exit?= Exit strategy
<p>1) Basis of community development activities (financial resources, connection with governmental organizations, local people group, marketing, and....) is established by local people</p> <p>2) Diversification in livelihood measure will be planned and the way for reducing pressure on forest can be confirmed</p>	<p>1) Technical support for orchard cultivation management and propagation of wild celery etc. by request of local people</p> <p>2) Study and examination is done for selling and marketing of productions and technical support is done</p> <p>3) Economic profit of productions is monitored</p> <p>4) Study is done for the change of livelihood scale and diversification of livelihood measure through interview to local people.</p>
<p>3) Soil conservation of sub watershed which small scale check dams was constructed.</p>	<p>5) Around of check dams and terraces should be checked. In case of necessity, NRWGO will budget its construction and undertake.</p>

(2) Agreement on VAP

1) All CF meeting

In November 2014, the 1st CF information and coordination meeting in the extension phase was held at the JAO meeting room in Bazoft with the attendance of 46 people including 15 CFs of various activity groups (including 3 female CFs) and 3 auditors from Kohgiluyeh-va-Boyer-Ahmad province. The major

contents of the meeting were information provision from the Project and NRWGO and discussion among participants. Summary of the work plan approved at JCC and NRWGO's new policy concerning the use of natural resources were presented by the counterpart. A representative of the Resalat Bank, which is considered as one of the funding sources for activities in the villages, was also invited and explained about low-interest loans.

2) Meeting with CFs in model villages

Concerning protected areas of each village, management status was checked and explanation was given to CFs concerning FRWO's policy change on the introduction of commercial tree species and establishment of extension models for protected areas. While they showed understanding about the introduction of commercial tree species, they requested explanation of the contents of the extension phase to Shoras and other villagers and it was decided to hold a meeting later.

To obtain understanding of the residents about FRWO/NRWGO's policy change for permission to plant commercial tree species in national land and to realize extension models, the Project held several meetings in villages to provide explanation. To introduce commercial tree species to VAP and plant these species from December 2015 to March 2016, the JICA Project forwarded to prepare seeds, seedlings, etc. parallel to discussion.

3) Formulation of a VAP draft for individual activity types

The basic rule for the extension phase was to focus on the maintenance of activities instead of carrying out new activities. However, a VAP draft was formulated for planting of commercial tree species in and around the protected areas that started this year based on FRWO's policy. First, before the formulation of a VAP draft, CF of each village was interviewed about pomegranate and fig cultivation.

(3) Implementation of VAP

1) Forest and rangeland management activity

① Condition of activities in each village in the extension phase

In February 2016, procurement procedures were conducted for pomegranate seedlings, and seedlings purchased from a seedling producer in Isfahan were distributed to the model villages except Tarom village. After that, status of seedling planting was checked.

In April 2015, planting condition was checked for pomegranates, figs and wild almonds in the pilot villages in Bazoft. Distributed seedlings had been carefully planted and pomegranate trees had just sprouted.

In May, unclear planting areas were checked with CF using GPS. In Mazerashte village, growth condition of pomegranates was checked and smooth growth was confirmed. The result of pomegranate planting to date is as described below.

Table 2-43 Distribution and Growth Status in Each Village

Village	Project executer	Land ownership	Scale of planting	Growth condition
Tabarak Sofla	Mr. Alidad Khodaverdi	National land (in protected area)	1.0ha	Good
Mazerashte	Mr. Khorshid Edivandi and others	Private land	1.32ha	Good
Drouarak sofla	Mr. Khalil Ahamadi	Private land	1.61ha	Partially good
Gazestan	Mr. Kheirari Asadi	Private land	0.1ha	Not good

Note: Taronm village, one of the 5 villages, did not receive seedlings. In Tabarak sofla village, the CF reported that part of the trees planted in NRWGO had been washed away by heavy rain at the end of November.

As described, new activities are not supposed to be carried out in the extension phase, except planting of commercial tree species. However, the pilot villages each made requests concerning maintenance needs for protected areas and for new activities. The following is the overview of the activities of each village including unique activities by the residents.

Table 2-44 Status of new Activities in Each Village in the Extension Phase

Village	Status
Tabarak Sofla	<p>[Measures concerning nomads]</p> <p>Plants have recovered in the protected area. According to CF, as the grassland production increased tenfold in the extension phase, cut plants (grasses) are provided to nomads living around the protected area to prevent their animals from entering the area. Watering places have also been constructed in the protected area with the CF's own fund to achieve conciliation with nomads.</p> <p>[Lease application for the protected area]</p> <p>It is the first time to plant commercial tree species in the forests in Chaharmahal-va-Bakhtiari province. Considering this activity in the protected area as a sustainable extension model, each department of NRWGO and CFs are jointly performing procedures for national land lease application.</p>
Mazerashte	<p>[Measures against illegal invasion]</p> <p>A meeting of representatives of Mazerashte village was held jointly with NRWGO's department related to the forest police. In response to complaints from villagers about illegal invasion, etc., the department said they would instruct Mr. Hailey, Director of NRWGO Bazoft office, to take responses. Village representatives requested increase of CFs and the counterpart replied that NRWGO would agree to increase CFs if villagers select CFs.</p>
Durak Sofla	<p>[Planting of wild almonds]</p> <p>The CF suggested that soil conservation measures should be improved in the protected area established by the Forest Section, NRWGO previously, and planting was carried out with the consent of the Forest Section. However, partly because of the financial difficulties of NRWGO, wage payment has been delayed.</p>
Gazestan	<p>[Discussion at a residents' meeting about continuation of protected areas]</p> <p>At the meeting, in response to the question asked by the Project, "What should the protected area be protected for?", residents gave more concrete opinions than ever before, such as "for children's future", "to preserve farmland" and "for groundwater recharge". However, the continuation was conditional on the repair of existing pumps for field irrigation so that they could preserve the protected areas by themselves and they said they could conduct maintenance if they could make income from the fields. It was decided that the result would be</p>

	presented to the Director General NRWGO as a collective opinion of the villagers.
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②Land for fig planting (cooperation with forest section NRWGO)

As the fig planting conducted in Mazerashte village by the three parties of the Forest Section, the village and JICA in January 2015 was considered as one of the sustainable extension models for the use and conservation of national land, Japanese experts continued discussion with the counterpart and residents about the assessment of the situation and future maintenance of the planting site.

Head of forest section, also visited the land for fig planting in Mazerashte, and CF agreed that a) NRWGO would install fences and supply seedlings, and b) villagers would conduct planting, irrigation and maintenance. As villagers were positive for the maintenance of the land for fig planting, it was also decided that the JICA Project supported to purchase and provide net for fencing.

After that, parties concerned with the planting site had several meetings, and, with the consent of all parties concerned, distribution of fencing materials were completed by December 3. For fence installation and fig planting, a NRWGO expert will visit the village and give instructions.

③Guard cost

Payment of guard cost had been one of the issues in assuring sustainability of the JICA Project. However, as a result of discussion among NRWGO, villages and JICA based on the exit strategy, cost sharing for each party in the extension phase was clarified and it was decided that villagers would pay the guard cost after the completion of the Project. Details of the background concerning guard cost payment were as described below.

Table 2-45 Background and Conclusion of Guard Cost Payment

	Contents
1 st payment Dec 2014 – Nov 2015	Guard cost payment was discussed with CF based on the exit strategy and, for the first payment in 2015, NRWGO paid for 6 months, villages paid for 3 months and the JICA Project paid for 3 months. Explanation was given that, for the second payment in 2016, NRWGO and villages would share the cost in a direction of decreasing the share for NRWGO and, after the completion of the extension phase, NRWGO would not pay guard cost and villagers would manage the protected areas by themselves. Guard cost was not paid to Tabarak sofla village as they were preparing national land lease application and indicated that they did not need it.
2 nd payment Dec 2015 – Nov 2016	For the cost of guard in the year 2016, the Director General NRWGO was told that all pilot villages were willing to cooperate for the JICA Project, fully understood the importance of forest and rangeland management and continued good maintenance of the protected areas, and was requested to pay the guard cost although NRWGO was on a tight budget. The counterpart, who also attended the meeting, proposed the share and amount of payment for NRWGO, villages and the JICA Project, and the Director General agreed that NRWGO would pay for 5 months, villages

	for 4 months and JICA for 3 months for the year 2016, as was the case the previous year of 2015, for the 2 nd payment of the guard cost.
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2) Highland Rangeland Activities

① Activities in Robatkoh highland

Tarom and Robatkoh multi-cooperative(R&T cooperative) was re-constructed in the 3rd project year, which of members include all of grazing license holders of the highland rangeland, and the project activities have implemented with the pre-condition of the members consensus on 3 years grazing rest period began.

During the 4th year, study and plan drafting work was conducted. And during the 5th year, permanent experiment plot(PP1) for long term, 30 years, monitoring of vegetation recovery was under construction. A stone throwing incident happened on the way for construction work inspection and survey, Japanese expert was prohibited to enter the highland, that the field activities was stopped, including a part of fencing works.

During the 2nd year of the extended phase, July 2016, the prohibition to enter into the site was removed, and following works have conducted; confirmation of un-completed parts of construction works, design and cost estimation for necessary materials in July, material order, pay, inspection of delivered material in August, and until October, absent period of Japanese expert, C/Ps of NRWGO Rangeland group have managed un-completed PP1 construction; painting of fence pole, sign board at entrance, marking display board for permanent plots for measurement. In November, setting of water proof cap for fence pole, an initial condition survey for the long term permanent plot; line sampling survey for vegetation cover; bush species and perennial grasses, and setting up of 2mX2m permanent plots establishment were conducted.

② Activities in Mazerashte highland

Based on VAP on Permanent experiment plot(PP2) establishment, in June and July, during Japanese expert absent period, NRWGO Rangeland group C/P and joint supervisors have conducted the field supervisory works.

At the end of July, inspection of construction, including material transport by donkeys, pole establishment, barbed wire setting, door install, supplement work by guidance, was finished and construction completion was confirmed.

Construction performance/quality was judged as excellent. Temporally pile setting for setting up buffer zone and survey plot setting, and an initial condition survey for the long term permanent plot; line sampling survey for vegetation cover; bush species and perennial grasses were conducted.

Works after October in Mazerashte PP2 are basically same as that of Robatkoh, line sampling, already conducted during July, was deleted, and fence pole painting, setting of water proof cap for fence pole, 2mX2m permanent survey plot setting works were conducted as a Joint work with Community Development group, because which was conducted as a part of CF training, which of included participants other than CFs were NRWGO staffs and MENARID, instructed by C/P; Reza Mohammadi and Mishima.

It is note worthy that the permanent plots; PP1, PP2, were established for long term, 30-50 year, observation. Among the project expert concerned on the field, above initial survey were conducted during

above ground part of vegetation are dry up season that, because which were not correct initial information including above ground grasses including fodder vegetation , it shall be measured again during an appropriate season, May to July 2017, regardless to the project existence. And also, it was also agreed on a view among the project expert concerned on the field, that it will be effective measure that the work will be done as a business of Rangeland section as usual.

Composition of directly managed survey members are; 1 person who can identify vegetation species, 1 person who works as note man (assistant), assistant for distance measure. Work day: 1-2 days for a site. And inside of the permanent plots, there include land slide, soil, sand and gravel moving area that they can be applied as; watershed management experimentation area(fixed experimentation plot for movement of soil , sand and gravel observation) . and also there are fixed photo point outside the permanent plots can be used as place fixed simple observation photo point for vegetation succession monitoring.

3) Community Development activity

Based on the Exit strategy, stated before, the sector have worked, aiming to establish such foundation as; funding sources, relations between concerned government offices, villagers group, marketing methods, etc., to enable the villagers to continue the community development activities by them-selves.

It shall be noted that the sector initiated the marketing activities after their agreement was made and entered by and between concerned villagers. Concerning “Fruit”, the sector have conducted various training, and in the extended phase, according to monitoring of activities, there were damages of chilling and frost in 2016. Counter measures for chilling and frost damages, insect and weed management and how to make irrigation system more efficient were raised as problems to be solved, and the project selected and conducted a training on the counter measures for chilling and frost.

① Workshop and seminar

To uplift marketing knowledge of concerned villagers, following workshops were held and certificate of the training attendance were issued for the attendants.

Table 2-46 List of Workshop and seminar (fruit garden management)

Date	Contents	Place	Number of participant
November 2015	Introduction for marketing(Fruit harvest, Package, marketing, Measurement, Data recording method), Market information collection and recording method	Tabarak Sofla	22 members including representative of JAO Bazoft office
June 2016	Details on the Marketing, Fruit harvest, packaging method(package, label), Selection, Sorting	Durak Sofla	30 members including representative of JAO Bazoft office
October 2016	The Pilot Fruit Gardens were damaged by Frost of February 2016 that a seminar was held to discuss the Counter measures for chilling and frost damages	Tarom	27 members including representative of JAO Bazoft office

② Marketing activity to Khuzestan province

Big township of Masjed Soleiman, Izeh, Shushtar, etc., of Khuzesten province are there near Bazoft

area, and, because there are potential needs for agricultural product, preliminary survey on their demand was conducted in October 2015, the expert conducted a marketing survey in Masjed Soleiman city with Fruit activity concerned CFs and could bound an agreement with agricultural product selling cooperative in June 2016.

Through additional survey, it was understood that, if products are planned to export to surrounding countries of the Persian Gulf, the products have to be acceptable by criterions of their countries, and the concerned information were collected and the information were offered to CFs of each village.

③Marketing promotion activities

For Marketing promotion, the project conducted such activities as; a leaflet making and distribution to appeal the project products for retail shops, and for local market places, making and distribution of label for the project products sales for fruit garden manages and introduction of project concerned product to local market places.

On saffron sales, understanding of digital measurement tool usage for small quantities unit sales were planned and implemented.

During the year 2016, the project name printed on surface of Vinyl bag were produced and distributed to producers by the project

④Sales and income survey

Situation of Sales and income of products by the project were surveyed at each village. Sales incomes from the products are shown in the following table.

Table 2-47 Products and Income of each village

Village	Products	quantity	Income(Rial)
Tabarak Sofla	Saffron	0.22 g	17,760,000
Mazerashte	Honey	30 kg	12,000,000
Gazestan	Honey	15 kg	4,500,000
Gazestan	Diary oil	20 kg	8,000,000
Gazestan	Diary Kashk	50 kg	7,500,000
Gazestan	Diary Ghara	37 kg	1,920,000
Gazestan	Butter	10 kg	4,000,000
Total income gained through project activities			55,680,000

Notes: Kashk and Ghara are local diary product of high demand
At free market 1 US dollar = 34,500 Iranian Rials (June 2016)

Table 2-48 Harvest and Sales amount (only Peach)

Village/ Orchard/ Site	No. of Peach Trees	Fruit Harvest (ton)	Cash Value of Harvest (10 ³ Rial)	Actual Sale (ton)	Actual Cash Earned (10 ³ Rial)	Amount given to Bebeficiaries/ Labors (ton)
Tabarak Sofla	200	2.00	40,000	1.00	20,000	1.00
Tarom-1	100	0.50	7,500	0.10	1,500	0.49
Tarom-2	50	0.25	5,000	0.20	4,000	0.05
Dorak Sofla	200	1.40	28,000	0.50	10,000	0.90
Mazeh Rashed	200	3.00	60,000	1.20	24,000	1.80

⑤ Scale of livelihood and its variety

Concerning Livelihood improvement activities by villagers, It was cleared that villagers are acquiring fund from micro-credit activities, invest it for such activity as; chicken farming, beekeeping and dress making, and they continue these activities.

And on wild garlic, which was distributed as a part of the project activities, the species are highly expected as potential income generation source. Wild slurry and medicinal herbs, already distributed species, also are revealing the effect of activities. The species variety was widened but it cannot be said that cultivation scale are widened at present.

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(4) Activity Monitor, evaluation and feedback by participants of VAP

Activity review workshop was conducted and through the workshop items of; number of participant, problems were solved or not, benefit, and on future, etc., were surveyed. Objective activities include, from start to present in time scale, kind of activities for which the project invested equipment and materials only and the project conducted training activities only. Extension officer of NRWGO also joined in the workshop.

Within a limitation of participated number, there were opinions that they have got benefit from the project, etc., are satisfied and expressed their hope to continue their activities.

The project hopes that NRWGO can get some hint to implement activities in other site by the information above.

(5) Analysis and categorization of VAP activities which have been implemented (Examination of extension model)

1) Exit strategy analysis

Based on the result of exit strategy analysis, target villages were evaluated in terms of sustainability as shown below. Tabarak Solfa village and Mazerashte village exhibited a high level of sustainability and Durak Sofla village and Gazestan village exhibited a middle level of sustainability. Looking at the contents of the activities in the two highly sustainable villages, in one village (Tabarak Sofla), national land lease application will be made and protected areas will be maintained by a cooperative; and in the other village (Mazerashte), national land lease application will not be made and protected areas will be maintained by the existing groups. Looking at moderately sustainable villages, in one village (Gazestan), microcredit is widely practiced by female groups, and, in another village (Durak Sofla), residents look to manage protected areas with understanding that profit from planting of commercial tree species will lead to sustainability. Thus, different villages have different approaches to sustainability, and it is considered that future support from NRWGO and residents' efforts will further improve sustainability.

Table2-49 Comprehensive evaluation of exit strategy in pilot village

Target Village	Inside Protected Area	Outside Protected Area	Remarks
Tabarak Sofla	There is high level of sustainability in protected area activities. Comparing to other 4 villages, good protection and utilization has been carried out. Since the leasing procedure is ongoing, there is strong motivation for maintenance by them.	Fruit orchards, saffron cultivation, and micro-credit boxes have high sustainability but the sewing activities have middle level of sustainability. There are challenges because of shortage of equipment for participants.	CF leadership is very strong. Not only CF but also existence of active and motivated cooperatives with marvelous ideas is effective
Mazerashte	There is high level of sustainability in protected areas activities. There is no request for leasing but the related persons have stably preserved the protected area and are utilizing it. Some of the families have made benefits from selling of the planted medicinal plants.	Sustainability level is middle. The production of peach is very good. They sell honey also and there is a company who comes from Shahrekord to buy their honey. They have planted pomegranate in the private lands.	In addition to high confidence of CF in the village, 4 kinships are cooperating for protection and maintenance of the protected area and furthermore they are doing marketing very well.
Durak Sofla	Sustainability of the protected area activities is middle level. They have incentive for protection but since the protected area is a land slide site, there are demands for planting commercial species surrounding the protected area. Until now, no request for obtaining national land lease has been offered to us.	Sustainability level is middle. Village is divided into two parts. Home vegetable garden and sewing activities have been carried out but have faced the marking challenge. Pomegranate has been planted in the private lands by support of NRWGO.	CF leadership is good but there is no one who generates idea. Some of the youths have carried out wild almond (<i>amygdalus</i>) planting in the steep slopes and there is a person who is tackling forest conservation.
Gazestan	Sustainability of the protected area activities is middle level. The size of protected area is small and if we want to carryout planting of commercial species, the commercializing is very difficult. No request for obtaining national land lease has been offered to us.	2 lady CFs of Community Development group have been able to establish 2 credit-boxes and comparing to other villages, they are stronger in activities of medicinal plants cultivation and beekeeping. Generally, sustainability of the community development group is middle level.	CF leadership is weak. There is lack of union among villagers. There is high dependence to government. But the activities by lady CFs are evaluated by NRWGO as a high level.

2) Establishment of extension models

Based on the evaluation and analysis of the exit strategy by the JICA Project, the following conclusion was drawn.

① There are several patterns of sustainability of forest and rangeland management in villages.

Some protected areas where national land lease is not necessary show high sustainability. Necessity differs depending on the village.

② Project implementers participating in participatory projects are also diverse.

Residents who are interested in the use and conservation of forest and rangeland are individuals,

family groups, activity groups, cooperatives, etc. and some are successful in a unique way.

③ Use and conservation activities to assure sustainability are not always carried out in national land.

For the use and conservation of forest and rangeland, activities can be carried out in common land and private land as well as in national land. There is a good chance that village development activities can support forest and rangeland activities.

Based on the above conclusion, models possessing diversity, selectivity and flexibility were established as extension models for the JICA Project. By using this extension model, NRWGO and villagers can aim for and implement sustainable forest and rangeland management in the whole village through the VAP workshops in which each project implementer would select various VAPs, including community development activities.

These extension models were established on the assumption that the new policy framework concerning promotion of forest and rangeland management currently promoted by FRWO would continue.

3) Contents of the extension models

② Forest and rangeland activities

As shown in the above figure, 5 types of VAPs for forest and rangeland management were established by the JICA Project. As for forest and rangeland activities, there are 4 types of VAPs for national land and 1 type for private land. The overview of each type of VAP is as described below.

Table 2-50 VAP in each type and its summary

Type	Summary	Implementer
A: National Land Lease	<ul style="list-style-type: none"> • It is aimed at use and a preservation with loan of a national land for a protected area. • A cooperative will be a window of contract • Procedure for loan is required in accordance with Article 3 of the law of Forest and Rangeland Conservation and Utilization. 	Cooperative
B: Non-lease national land	<ul style="list-style-type: none"> • It is aimed at use and preservation without loan of a national land for a protected area. • Local people group undertakes maintenance by themselves. • Protected area is to be managed by the profit from commercial trees and herbal plants. 	Family group Local people group
C: Illegal cultivation	<ul style="list-style-type: none"> • NRWGO aims at coordination with illegal cultivator for their farm land exists in a national land.. • NRWGO aims at introduction of cultivation by medicinal plants to the illegal cultivator instead of driving them. 	Individual Family group
D: Common land	<ul style="list-style-type: none"> • Commercial trees are to be planted at common land in national lands. • Local people group is to be organized and the target area is maintained and managed by the group. 	Family group Local people group Cooperative
E: Private land	<ul style="list-style-type: none"> • In private lands conversion is promoted from farmland to planting commercial trees and/or medicinal plants. • Promoting maintenance of planted area and also conservation of surrounding forest. 	Individual

In the community development group activities of the JICA Project, efforts were made for capacity building of the villagers through training of villagers, CF and community development groups, and good

results were achieved. Concerning extension models, VAPs are separated into those that directly contribute to forest and rangeland management through planting of medical plants and beekeeping in protected areas and those that are not related to land and indirectly contribute to forest and rangeland management. Both are for sustainable forest and rangeland management of the target villages.

② Community development activities

In JICA Project, it was tried to develop the capacity of local people, CFs and groups by different trainings. In the extension model focusing on the training, VAPs which directly are related to forest and rangeland management and VAPs which are related to sustainable management of forest and rangeland in future are considered.

Table 6-5- A summary of different types of VAP on community development activities

Type	Summary	Implementer
A	<ul style="list-style-type: none"> Beekeeping, medicinal plants cultivation, etc. are done in the protected area in order to finally manage the protected area by the earned income. 	Cooperative Family group Local people group
B	<ul style="list-style-type: none"> One way is that a portion of earned income from the activities in private lands be allocated for sustainable management like activities of sewing, beekeeping, micro- credit boxes etc. The other way is that private profits be used in community development activities with purpose of sustainable utilization of forest and rangeland in future 	Family group Local people group Individual

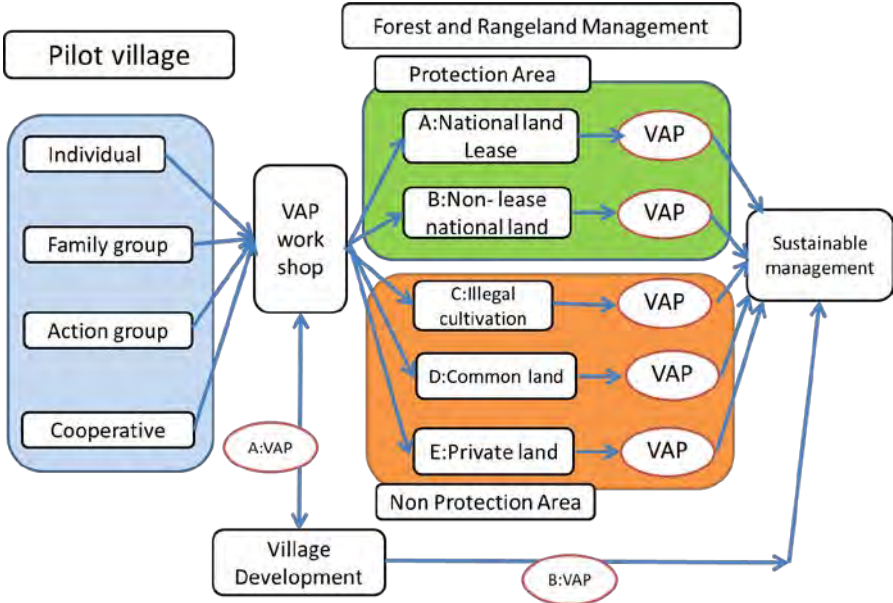


Fig2-2 Extension model aiming at sustainability of forest and rangeland management

4) Problems and solutions for realization of feasible VAPs

The above-described models showed that, through VAP workshop, various project implementers can select a VAP according to the condition of the area and the implementers needs and contribute to sustainable forest and rangeland management.

To carry out the selected VAPs, not only a system but also concrete problem solutions to implement them will be necessary.

Based on the experience in Bazoft and consideration of the exit strategy, problems and their solutions

for the realization of feasible VAPs are summarized as shown below.

Table 2-51 Problems and their solutions for the realization of feasible VAPs

	Problem	Solution
1	CF's capacity for execution	<ul style="list-style-type: none"> • Putting aside that CF alone cannot implement the VAP, result of VAP differs depending on talent of each CF. • According to the lessons learnt in the project, we understand that a CF who has leadership talent, not only unite village people but also he/she can produce new ideas for the plan. • However such ability is not quickly made but by capacity development training courses such ability is made. • CF is selected by village people. It is necessary that NRWGO experts give advice to people on selection of CF by considering village condition and workshops.
2	Existence of cooperative/org anization	<ul style="list-style-type: none"> • For management of protected area, it is required to lease the national land that one of the measures is law of conservation and utilization of natural resources, Article 3. • Organizing a cooperative to do forestation works with NRWGO forest section requires long time and furthermore the time for approval by NRWGO is needed but in the other hand after establishment of cooperative, there is the possibility of payment of loan by NRWGO.
3	Loan/ Micro-credit boxes	<ul style="list-style-type: none"> • For management and conservation of protected area and planted trees and for development of villagers' livelihood, revolving fund is required for village activities. • It's effective to use governmental organizations' funds and/or low interest loans of financial institutes for supplying this revolving fund for example in case of governmental financial sources, FRWO budget is available. • Also there is possibility to use micro- credit boxes in the village for example micro-credit box of Gazestan Village which have been established in the third year of Project. • To receive loan from bank is not easy. But there is possibility to supply fund from the revolving funds of FRWO.
4	Marketing	<ul style="list-style-type: none"> • To ensure sustainability, it is necessary to get inside and outside financial sources; this is a challenge which exist among all individual and cooperatives. • On the other hand, there is the price competition issue that the information on this issue can be asked from JAO in Province and County levels. However the support by traders is required. • For development of market and sale of products, which is started from inside the village and is expanded to neighboring villages, neighboring and other counties and provinces, it can be used from governmental services and/or market.
5	Seedling produce activity	<ul style="list-style-type: none"> • The number of required seedlings should be estimated, then the plan be prepared and activities be started. • The most perfect way is that NRWGO clarifies in the VAP the number of the required seedlings and makes a system for guaranteed purchase of seedlings. However such thing has not been done in JICA Project. • When such system is established, the possibility to sell the produced seedlings to other areas is also made that it can become an income source for local people to conserve and utilize the forest.
6	Preventing the illegal actions	<ul style="list-style-type: none"> • Culture of local communities has significant effect on preventing the illegal actions • There are severe punishment in regulations of FRWO for illegal actions in forest and rangeland but according to the sayings in the field, these punishments are not perfectly enforced. • Also there are limitations for increasing numbers of guardsmen in NRWGO • In case of JICA Project's protected area in Tabarak Sofla Village, since vegetation cover of the protected area has been improved, fodder is harvested in the protected area and used by the neighboring nomads. This is an example of satisfactory solution by harmony with nomad.

In addition, there are some solutions needed more times, therefore once VAP has been agreed and as far as villagers request, budget and economical follow-up and technical advices by NRWGO are necessary to cope with flexible.

(6) Revision of the guideline

1) The major points of the guideline revision and the preparation flow

Based on the suggestion of September 2012 from JICA’s mid-term review study team, it was decided to develop a guideline for participatory forest and rangeland management. A team for the guideline preparation was formed within NRWGO. In January 2015, a draft guideline was completed and a seminar was held in Shahrekord. After that, JICA’s final evaluation team suggested that a guideline that could be extended to other provinces should be developed, and it was decided to revise the draft guideline in the extension phase. The flow for the guideline development is as shown below.

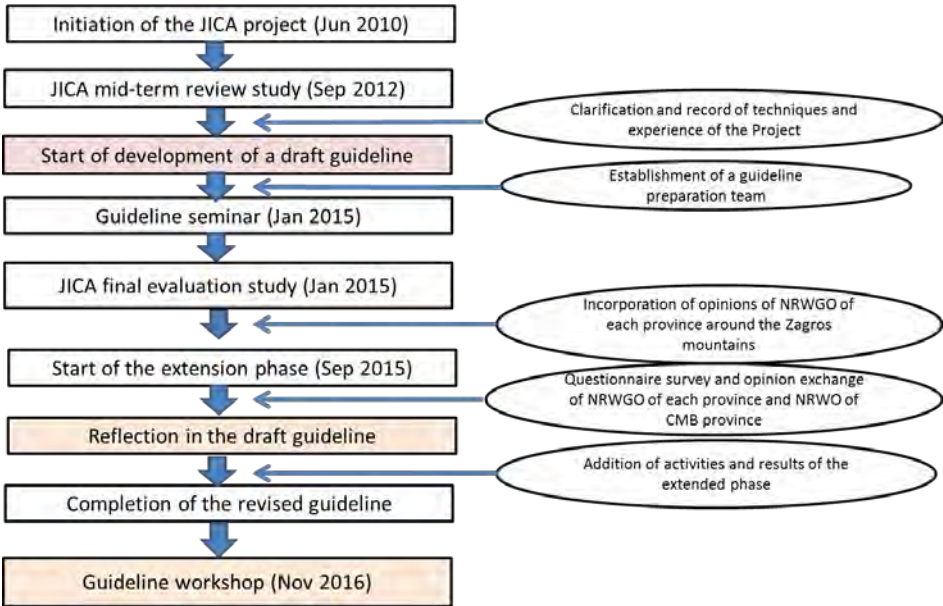


Figure 2-3 Flow for the Guideline Preparation

2) Establishment of a guideline preparation team

As with the preparation of the draft guideline, a guideline preparation team was established again, mainly consisting of the counterparts. The Deputy for Planning and Budget Affair was added to the guideline preparation team because a new chapter about budget was added to the guideline.

3) Questionnaire survey and opinion exchange of relevant provinces

From November 2015 to May 2016, questionnaire survey and opinion exchange were conducted in 9 provinces in the Zagros mountain range area. As instructed by the JICA Safety Measure Office, the survey was not conducted in Kurdistan province for security reasons. The following is the brief description of the result in each province.

The result of the questionnaire survey generally showed a high evaluation on the level of understanding although the level of understanding of each guideline chapters varies depending on the respondent. Concerning the use of the guideline, many respondents said that the guideline can be used in each province with its own ingenuity because different provinces have different natural conditions,

socioeconomic conditions and ethnic groups. Comments concerning each chapter and participatory projects were summarized into a guideline reflection sheet and the result was reflected in the draft guideline.

The results of opinion exchange in the NRWGO offices of each province and visits to local project sites are as shown in the following table and various opinions about participatory projects were collected. In the opinion exchanges, some provinces said that there are various types of participatory projects and the most important thing is trust in the villagers. The topics that many questions were asked about include project budget, grazing countermeasures and trust in villagers.

Table 2-52 Major Opinions Exchanged with Provinces and Overview of Field Visits

Province	Contents
Lorestan	Through opinion exchange, it was found that participatory approaches are actually taken in some places although they are not aware of participatory approaches. Through field visits, the head of the grassland cooperative talked about their activities.
Fars	There are various types of participatory approaches. Those who are trusted by the villagers are most suitable as CF. There are many rules that ban ways to protect (use) natural resources.
Khozestan	Field visits were made to a forest protected area managed by a cooperative was visited and to the site of a successful case of oak seedling planting. Concerning illegal invaders, they listen to them and help them gradually understand the importance of protected areas and natural resources instead of bringing them to trial.
Kohkilouye-va-Boyer ahmad	The province explained their participatory project activities. A project for shift from grass to medical plants was presented. Market issues, opinions about the introduction of commercial tree species, etc. were discussed.
Kermanshah	There is increasing interest in grazing countermeasures and the Kermanshah provinces has the same problems as other provinces. Concerning PRA as an entry point for a project, they say that it is important to check residents' awareness of problems and ensure transparency.
Iram	Field visits were made to a site where oak trees were planted with the participation of people and to a nursery managed by NRWGO of the province near Iram city. The techniques for planting of large seedlings can be useful in the future in terms of ensuring growth and securing water.
West Azerbaijan	A field visit was made to a site for participatory grassland management conducted by the Watershed Management Department outside Urmia city. Opinions were exchanged about budget allocation required for the Project and countermeasures against domestic animals.
Isfahan	A field visit was made to a carbon fix project related to countermeasures against desertification conducted jointly by NRWGO and UNDP. At a meeting, opinions were exchanged about project outputs, microcredit and countermeasures against domestic animals.

A meeting with the heads of 7 district offices (NRWO) in Chaharmahal-va-Bakhtiari province was planned for opinion exchange about the draft guideline. However, due to the Natural Resource Week and the election of diet members, heads of three district offices (NRWO) attended. Questionnaire responses were collected from all districts except two NRWO.

4) Revision of the guideline based on the outputs of the extension phase

In the extension phase, there were problems with 1) implementation of the exit strategy, 2) formulation of extension models, 3) implementation structure and internal/external cooperation, 4) establishment of the project budget in NWGO, and 5) improvement of CF training. Summary of these problems was reflected in the draft guideline and the final version of the new guideline was completed. Draft contents of the guideline are as shown below.

Draft contents of guideline (final version)
Abbreviations
Introduction
Chapter 1: Outline of the Guideline
Chapter 2: Basic Concept of People Participation in JICA Project
Chapter 3: Methodology
Chapter 4: Supportive Laws and Regulations
Chapter 5: Survey of the Area
Chapter 6: VAP Formulation and Extension Model for Sustainable Management of Forest and Rangeland
Chapter 7: Planning and Implementation of Forest and Rangeland Management Activities
Chapter 8: Planning and Implementation of Community Development Activities for Forest and Rangeland Conservation
Chapter 9: Monitoring and Evaluation
Chapter 10: Training for Improvement of Participatory Forest and Rangeland Management
Chapter 11: Project Implementation Structure
Chapter 12: Project Budget Procurement and Procedure
Chapter 13: Key Issues for Future
Final Message

5) Implementation of a guideline workshop

On November 13, a guideline workshop was held at JAO Meeting Room with FRWO personnel, the deputies for technical affairs of Zagros provinces and the deputy for watershed management affairs along Karoon river under the theme of “Promotion of participatory forest and rangeland management”. In this workshop, a panel discussion was held concerning some of the problems of the extension phase – 1) formulation of extension models, 2) establishment of the implementation structure and 3) budget procurement – and participants deepened their understanding. On the following day, a field visit was made to the Bazoft area, where JICA project is located, opinions were exchanged with CF, and participants visited to a protected area. The day’s schedule was successfully completed.

2.2.4.7 Problem to be solved

(1) Previous stage of project implementation

1) Land right issues

Even after initiation of the Project activities, some of land owners claimed his land ownership, based on customary use of national land, and caused problems on employment of guards, selection of planting sites, etc. As some people are still claiming their land ownership in some villages, relevant parties shall conduct, as many times as possible end even Pre-VAP signing stage, additional explanation on the matter, and strong measure, for example, stop to continue the operation, shall be selected, if the matter was not well understood.

Problems related to rights to the customary land are deep-rooted and cannot be solved quickly, because the customary land users depend on the land for their living. Such situation will be changed gradually in future, because of business change of the customary land users, die and their property right succession, etc.. In the occasion of dispute settlement, NRWGO, who is the national forest and rangeland manager and, also, is an authority to permit the land utilization, will duly be involved on the matter to explain and to re-distribute concerned utilization right.

The project has implemented activities in highland rangeland, cooperating with Eidivandi family of Mazerashte village, where has been used by the family. And it was cleared by an administrable boundary map in NRWGO that the working area belongs to Mazerashte village and Algi village. The project investigated the land accompanied with both representatives of the villages, to escape from possible dispute, though Algi village side has recognized that Eidivandi family in Mazerashte village has actually used the area as customary land. NRWGO operator shall, consider a possibility that there might be different between customary land area and administrative boundary; VAP implementation designed location shall be confirmed together with concerned villagers.

2) Problems of inside villages

In order to select target villages during the project initiation stage, in case of Algi village, it was found, during a stand talking with local peoples, that there were difficult problems unable to coordinate within the village, and it was felt that the project activities might be interfered during its implementation stage. And JICA project eliminated Arte village from candidate villages. Similar case during the implementation stage happened in Durak Sofla village. There has been a profit sharing problem among three parts in the village; top, central and lower parts of the village, and quarrel among villagers appeared during the project workshop in the village. The kind of happening is tending to easily be happened in villages, especially, during initial stage of works. It shall be noted that, in case if trouble might expected between the project and a village, the village shall be eliminated before the project start, and also it shall be noted as pre-consideration that withdraw from a village during the project operation stage can be a considerable option, if there happened a trouble between the project, which cannot be solved inside the village.

(2) Preparation stage of each activity

1) Cooperation issues

The project has strengthened to realize collaboration activity with other organizations concerned, based on recommendations from the middle term review team, and an expert for collaboration and coherence was allocated during the extended phase. The reason was because of the agricultural activity and small-scale business, which are outside range of NRWGO responsible works, but these activities are being

important for participatory activities by the peoples.

Since the project paid training costs of the village activities required for TVTO or for JAO and that activity with local peoples were, duly and firmly, carried out. And it was cases, even if necessary coordination were already arranged as preparation activity in a village, if situation of funding allocation, etc., from cooperation partner's organization, were not clear, the cooperation activity were not progressed. When cooperation resources, including budget were prepared from NRWGO, which is a main body of project operators, implementation of the cooperation work become sure and which enables trust building between residents.

When in Tabarak Sofla village protection area was established by the project, it was already told that a road construction work will soon begin. But, in reality, the road construction work schedule was delayed due to delay in budget allocation. And, some part of fences, installed before the road construction was damaged. In order to escape from such matters, close connection and coordination among other ministries and government offices are required. It is considered as possible to coordination among other organization's activities and NRWGO's activities concerned, because NRWGO has authority to issue land utilization permission for construction activities, etc., for other organization in National Land.

2) Facilitation

The Project has held many workshops, seminars, and briefing sessions in the villages, in order to deepen understandings of relations between forest rangeland management activities and community development activities, and to make the project contents widely be known by the village peoples. And the project has tried to apply and to develop workshop management method and facilitation tool adaptive for the field environment, taking into account the objectives, difficulty level of implementation and available time frame of the project and of the village. It is recommendable that, under guidance of experienced Iranian experts, young facilitators and extension officers will be able use the above mentioned experiences from now.

Especially, because of the project activities are not well announced for villagers, some kind of villagers, who are not engaged in the project activities, misunderstand that those who has participated in the activities have monopoly revenue from the Project. It is recommendable that NRWGO and CFs to hold village workshop, activity site and explanatory meeting, etc., for general villagers to eliminate misunderstandings. To implement participatory forest and rangeland management, it is important for NRWGO to find opportunities to visit village, to assist villagers know more about the project activities, and listen the villager's needs, regardless of size of their needs, and their views.

3) Listen to objective view from outer expert

For livelihood improvement activities, local people' need shall be respected, and to listen outer expert view has also important value. There were several views, when the project decided training contents for ladies in villages, from NRWGO expert, Dress making expert and ICHHTO expert. NRWGO expert said that; traditional handicrafts of nomad will be effective for the livelihood improvement. Dress making expert said that; traditional clothes and small goods are already made and sold that skills to make other material may have needs. ICHHTO expert said that; products development for present city consumers is necessary. But because it was starting stage of the project that dress making training was selected, because there were highest demand from village ladies and which of skills will firmly be learned by them. And during the latter stage, marketing route through ICHHTO was confirmed and the trained group found way

for traditional small goods production. It can be said that by Listening various kind of outer experts view, situation of field activity could objectively be acquired.

(3) Implementation stage of activity

1) Protection of protected area by the benefit from protected area

Applying cost sharing system that; the project prepare seeds for sowing in the established protected area and the local people implement excavation and sowing, sowing of wild celery, wild garlic, and medicinal plants were carried out. These crops have grown favorably and during the extended phase some part of wild garlic are becoming harvest stage. From now on, it is recommended for NRWGO and for CFs that, recognizing protection of the protected area is a half of purpose as National Government , and to achieve the purpose , such measures as; distribution of crops and management method among the local people, instruction for harvest and its management, monitoring, marketing, and prevention from robbery, shall be taken to meet the situation.

And, after entering at an extension phase, FRWO sets forth the policy which enables planting of commercial tree species, such as a pomegranate and a fig into a national land, and it has become possible to promote more of the people participation in protected area. However, it takes another 4 years, as wild vegetable and herb to have some available harvest, even when grafted seedling or cutting have planted, that the income from application of the new policy will not expected within the project term. Since the pilot project by this policy has just started, the issues to be solved, such as pest and disease by single tree species, necessity for watering in the dry season, reservation of a good seedling, the difficulty of harvest for a short period, and concerned law application, will be in sight from now on. It is recommended that NRWGO and CFs centered implementation group shall monitor the site, try to find appropriate solution for the site and shall apply the solution.

And, in the Tabarak Sola village, although trespass have not ceased in a part of protected area, recovered grass fodder mowing were permitted to nomad , and constructed a watering place for the nomad's livestock in the easiest place to watch inside protected area. By the measure, illegal invasion of nomad was ceased and nomad-villagers symbiosis became possible. This example can be an example of external invader control application of profit sharing method to protect protected area.

2) Deepening of maintenance management activity in protected area

The vegetation of the protected area has been growing smoothly as above-mentioned. Especially, grass vegetation has been recovering with changing species gradually. Concerning forests, seedlings are growing slowly and which will still require more period for regeneration, but under layer vegetations are becoming rich. The vegetation recovery means that there are ground biomass and combustibles are increasing, and that forests fire preventive measures preparation are urgent matter. Moreover, it is recommended that NRWGO expert and CFs centered group shall develop and implement technique for appropriate use for recovered vegetation as an example of the above-mentioned Tabarak Sofla village case.

3) NRWGO's Involvement for the project continuation

The project faced on protected area concerned problems which the villagers could not solved by them-selves. In case of Durak Sofla village, since the village also has had problems in the village, there were 3 times of representative CF's shifts from the project initiation. And, in each occasion, concerned experts worked to solve the problems.

On the other hand, as Tabarak Sofla village case; co-existence with nomad and village, the protection was smoothly be conducted by villages them-selves, through developing inventive approach which is acceptable for the site. It is also recommended that NRWGO shall continuously be committed to the villages through periodical monitoring, which will secure communication opportunity of village peoples, supporting of the villager's problem solution and which may enable to spread success examples to others.

4) Soil conservation activity

The protected area establishment, also, is a soil conservation activity, because of vegetation recovery increase vegetation coverage which is an effective for soil erosion control. Introduction of contour line cultivation (a part of agro-forestry) and small-scale check dam construction was conducted by the project as more positive soil conservation activity. Those activities are soil conservation activity, aiming national land conservation that those were implemented not only in national land but also in private land.

Until now, NRWGO full paid public construction works formed soil erosion control activities were conducted without differences between national land and private land.

On the other hand, villagers are causing acceleration of the soil erosion, because they are using the national land, as custom, for cultivation of wheat and for animal grazing.

It is recommended to examine possibility of cost sharing and its available form, and shall consult with villagers; because villager's consciousness will be uplifted by conducting villagers centered land conservation activities and also because there is a theory that, if a land is used for private income generation, the private person shall dully is requested cost for land conservation.

5) Issues related to fruit tree maintenance

Fruit garden establishment activities have been implemented from 2nd year as livelihood improvement activity, and although harvest quantity is little, the harvest of early peach has been attained from 5th year. Therefore, local people's concern was increased and some of other local peoples have established fruit garden independently. The project conducted technical training for fruit tree cultivation, and it is recommended for NRWGO and/or concerned organizations to implement such training for yield increase as; more accurate countermeasure for pest and disease in growing stages and weed control, etc. . Moreover, to examine introduction of agriculture production process management (GAP: Good Agricultural Practice) also is preferable.

6) Marketing

The project have conducted livelihood improvement activity, and other than daily product and traditional handicrafts already on sale, the project introduced such kind of products as; honey, fruits, small cloth belonging goods, etc. are increasing and are being commercialized. Though the project conduct market research of those products during the extended phase, it is recommended for NRWGO and concerned organization to continue such aggressive marketing activities that; to monitor the market condition, grasp the trend of the product demand, to develop packing of fruits, etc., to examine dry fruit production processing business, and , especially for agriculture products, to conduct "area brand" promotion activities, because of the access condition of the area from a big city is a disadvantageous condition, whereas natural environment is conversely rich.

7) Micro credit system as funding resources for village activities

It was understood that Micro-credit system; small scale regular saving fund type, is an effective system for such mountainous area as Bazoft, where there are not so favorable financial access condition, two groups of micro credit were established in Gazestan village, and Tabarak Sofla village followed. To establish and implement the Micro-credit system,, existence of excellent CF is important, And that concerned facilitator and extension worker shall communicate with local people well, assess the capability and relation with local people of CF and then shall start up the system,

8) Positive effect of activity implementation

From around 3rd year, when the project began full scale activities, such request as; establishment of new protected area, fruit garden installation, and wild vegetables and medicinal herb cultivation activities, etc., from local peoples who have not participated in the project activities, were increased. And numbers of local peoples who come to take contact positively to NRWGO or CF of village have increased. Even the project could not show up its achieved result at the stage, the project understood the people's response that it is because the local peoples saw the project initiated activities with his own eyes and the local peoples have felt possibility to do something by him. Thus, the impact which begins at an early stage even if small-scale, and actually starts activity on the spot is important for activity.

It is important that, even if it were small scale, start up field activities from early stage and showing up actual result. And it is also an important subject to develop activities, activating the people's consciousness. It is recommended for NRWGO that courteous and fair-spoken explanation for villager to understands rightly on cost sharing and conditions for activities implementation, for example, there is no payment of guard cost directly, instead, local people can plant commercial tree species, etc., because the project could make implementation condition more clearer than before, through accumulation of try and error experiences.

(4) Monitoring

1) Vegetation recovery monitoring

Forest regeneration has been monitored since 2nd year of the project, using the project established fixed monitoring plots, the data of seedlings regenerated location and its seedlings number have been obtained. Through close observation of the plots, it was found that seedlings germination and growth are well in gaps between rocks and on exposed land surface. And it was told that sunshade is necessary for Oak regeneration, it will be necessary to continue the regeneration monitoring plots observation, and comparative study on different effect of shade existence and non-existence for regeneration of oak. Although oak species in Japan has high ability of sprouting and that coppice regeneration is treated as an important regeneration technique, but due to NRWGO's restrictions on coppice regeneration, shoot cutting for density control could not be done for oak regeneration, only growth of sprouts were observed. It is recommended for NRWGO to examine forest regeneration method by planting big sized oak seedlings and to develop monitoring system collaborating with villagers, etc...

Since the highland rangeland activity started after the mid-term review study and the area were large and landowner's consensus building took time, etc., installation of fixed experimental plots were completed during the extended phase. And primary monitoring survey of the highland rangeland of the plots was carried out in autumn of the project final year, which was not exact survey, because it was conducted during the dry season. That it is recommended to implement survey in spring and to continue monitoring survey of periodical interval.

It is recommended for NRWGO that for both of monitoring survey concerned monitoring system shall be established, which of monitoring works will independently be conducted by NRWGO forest section and rangeland section.

2) Soil conservation monitoring

It is clear that by establishing protected area vegetation will be recovered and by increasing vegetation cover, soil erosion prevention effect will be obtained. For example, JICA expert and Iranian counterpart understood that the soil erosion in the protected area was decreasing greatly when compared with places where the project formally established protection area. But because of soil erosion data collection, concerning co-relation between vegetation recovery of the protected area and soil erosion volume alternation, was not planned and was not measured, that it is difficult to evaluate the situation based on objective data. But the data have a significant value for NRWGO to prove that vegetation recover is important soil erosion control measure, because NRWGO is responsible for watershed management and for national land conservation. That it seems necessary for NRWGO to conduct measurement of soil erosion for responsible explanation, even if it were simple method with low accuracy, for example, soil flow measurement by stick and control method of soil erosion flow volume comparison for inside and outside of protected area using small sized plots.

2.2.5 Activities on the Output 4

2.2.5.1 Achieved results of the third year

Though no description shown in the PDM for the activities in the 3rd year, because of necessity of cooperation with other institutions, activities with agriculture department or related institutions were conducted in rural development activities. The mid-term review study conducted in the third year, and it was indicated to cooperate with other institutions.

1) Cooperation with JAO on fruits cultivation

According to the mid-term review recommendation, the meeting about cooperation with Horticulture Management Division, JAO was held. It was expressed that further stepped up collaboration would be carried out by JAO. After the meeting Bazoft was visited with head of Horticulture Management Division of JAO and the situation was explained to understand the field, then adequate expert was recommended. The expert was employed as a JAO staff whose technical fee was paid by both JAO and the project and small scale of nursery for orchard and management for maintenance were instructed by the expert.

2) Cooperation with vocational technical center on the sewing activities concerned

Although the contract was terminated, it was agreed by C/P Mr. Rezazadeh and Director of TVTO, that site visit to Mazandaran province would be carried out in collaboration with vocational center focusing on women's activities.

2.2.5.2 Achieved results of the fourth year

Though no description on PDM for the activities same as the third year, because of necessity of cooperation with other institutions, activities with agriculture department or related institution were conducted in rural development activities. The mid-term review study conducted in the third year, and necessity to cooperate with other institutions was recommended, and the activities have done with more

attention.

1) Cooperation with JAO in agriculture sector

Secondary to the third year, technical support and seedling supply on orchard related activities were provided by the JAO Horticulture Management Division. Regarding beekeeping training collaboration with Livestock Breeding Division was realized.

On microcredit activities, strong cooperation was given by JAO staff in Ardal district, i.e. introduction of examples, set up of activities in Tabarak Sofla village and attendance to the explanatory meeting. However, it is difficult to maintain to request cooperation to an additional work under the present condition like a volunteer level, so that there remains the subject how to manage cooperation after the 5th year. JAO staff participated in seminar for transfer the experience of the project expert, the recognition on the project activities of community development seemed to be increased. While some JAO staff appreciated the approach of the project, others criticized among the participants that the participatory approaches were inadequate for such special area where tribal and family relationship are complex like Bazoft. It is necessary to discuss between NRWGO and JAO on appropriate relationship for post project.

2) Cooperation with Agriculture Training Center

In case agriculture related activities are conducted as the project ordinary business, cooperation with JAO is required, under the basic training course, however, it was found that cooperation on training is carried out effectively if the operation is commissioned to the agriculture training center.

3) Cooperation with vocational training center on the sewing activities concerned

There was no contract on training in the fourth year, but cooperation has been kept. Inspection to the World Bank Project in Mazandaran province was carried out focusing on women group activities, which relates especially to commercialization after sewing training, and the project requested cooperation within frame work of sewing training. The project then received an offer from the institute to arrange a micro-bus and lodging for the participants from the village.

The staff of vocational training center accompanied to the site inspection and seemed to be a good opportunity to have information from other project carried out by other institution out of the province.

2.2.5.3 Achieved results of the fifth year

Though no description shown in the PDM for the activities, which is same as the fourth year, activities with Agriculture Department were carried out due to necessity of cooperation with other institution. It was to be considered to collaborate with a project of MENARID implemented by FRWO with UNDP.

1) Cooperation with other institution

Cooperation with other institution has been implemented as follows.

Table 2-53 Contents of collaborating institutes

Institute	Contents of cooperation	Burden by the project
Agriculture Department	Teaching of microcredit by women's extension staff of Koohrang district	Daily allowance, transportation expense
Agriculture Training Center	Dispatch of instructor who has experience of bee keeping	Daily allowance, Overtime payment, transportation expense
Vocational Training Center	Though contract of training ended, reason for no adoption of bank loan by certificate of completion of receiving lecture, and follow up of explanation to the inhabitants after then. (it is not sure whether explanation was actually carried out)	As the person in charge for bank loan who was entrusted at the time became head of center, careful correspondence to the inhabitants was requested excluding the case that the loan is not obtained at Bazoft.
Women Division of Provincial Government	(Under information collection)	Activity of women's division has not yet be active, It was found to be difficult to receive cooperation as long as detailed requests were brought into.

2) On MENARID project which was started up by NRWGO watershed management department

MENARID (Integrated Natural Resources Management in the Middle East and North Africa) is UNDP international project having been conducted as sustainable integrated development program, which of covering countries are in near-middle east and north Africa, including Iran, Jordan, Algeria, Tunisia, Morocco, Egypt and Yemen.

MENARID-Iran project started in August 2011, as GEF/ UNDP cooperation project and which of representative of Iranian government is FRWO. Upper goal of the project is implementation of integrated sustainable nature development which is adaptive for climate/weather environment of each country. Further more, the project is aiming to conserve ecosystem and livelihood improvement of the local community. To achieve these purpose, the MENARID project has strong intention of active and close cooperation with other national project. In case of MENARID-Iran, they set up integrated watershed management organization as implementation system in each province and then implemented. They form organizations of the provincial level and local level the provincial level organizations are "Planning and monitoring committee", the member are composed of implement concerned organizations, and "Technical Committee", and the member are composed of NRWGO staffs concerned. The local level Committee, named as " Integrated management committee", the members are composed of the pilot area included Chief of District and the area, office of concerned organization in the district level.

After September 2013, FRWO decided to conduct MENARID extension phase, covering Karoon watershed area, and Chaharmahal-va-Bakhtiari Province was selected as implementation province.

After the nomination of the province as MENARID project, NRWGO conducted preparation works, such as; construction works of watershed area management for Dam, negotiation with water and energy resources management organization, data collection for watershed management, continuous coordination with pilot area and registration of Karoon watershed area as World natural heritage, etc.

Then, there scheduled that; submit budget request for MENARID project operation, training and nursing of facilitators for operation in the pilot area, knowledge and information collection of concerned pilot area, integrated data base building for Karoon watershed, GIS customize, Karoon watershed nature conservation plan making and preliminary study for registration as World natural heritage

Deputy for watershed management of NRWGO and Head of Karoon watershed management office initiated to propose an idea in 2013 that the MENARID project have a hope to include extension of achieved result of JICA project, and exchange opinion among MENARID and the project team have

conducted. Continuous study on the project activities succession, expansion of area, way/form of collaboration were required.

2.2.5.4 Achieved results of the extended phase

(1) Survey analysis for reinforcement cooperation (to conduct survey analysis for establishment of cooperation with other institutes)

In the extension phase interview was carried out from other institutes or projects regarding what type of cooperation is necessary with which institute, or what kind of cooperation system is required for the project and for NRWGO. As for MENARID especially, in addition to MENARID in Chaharmahal-va-Bakhtiari province, on-going MENARID in other province, survey analysis was carried out with regard to cooperation with other institutes.

1) Inspection survey of MENARID in other province

Among the three provinces of Kermanshah, Yazd and Sistan-Balochestan, where MENARID is undertaken, field survey was carried out from 19 to 21 January, 2016 in Kermanshah and from 26 to 28 January, 2016 in Yazd to investigate the progress of MENARID and situation in collaboration with other institutes. Schedule of survey, objective and methodology are shown hereunder.

①Objective: Confirming overview of MENRID project and following points

- Main point for substantially functioning MENARID system (including cooperation with other ministries or departments)
- Difficult point to be functioning the system
- Present problem (improving point for the future)
- Relation and role of other divisions excluding watershed management division in NRWGO toward MENRID. In addition comparison of project is carried out between MENRID and JICA, hereby it will be reference for the future project management of JICA.

②Methodology

- Through meeting and field survey the point explained above objective was confirmed.
- No in-sidely conducting inspection by JICA project but explaining the contents of JICA project to the counterpart, and the points shown in the following table are to be discussed in a workshop form, and positive (strong) point and negative (weak) point of the MENARID project were confirmed with each reason for realization and also including the countermeasure to overcome each of them.

③Results

Results of inspection to the MENARID project in Kermanshah province and Yazd province are summarized hereunder.

Table 2-54 Positive or strong point

Kermanshah province	<ul style="list-style-type: none"> • Leader of the area and capacity of other organization are used when project is carried out. • Knowledge of inhabitants is improved. • Provincial mayor and district mayor who are able to approve certificate chair the committee. • Trust between inhabitants and administration is matured. • In response to the decision of the committee duties and works are done by the initiative of district mayor. • Voluntary organization is established. • Women’s participation is promoted. • Local knowledge is utilized effectively.
Yazd province	<ul style="list-style-type: none"> • By job creating for sustainable culture of medicinal plants people has an opportunity to return village. • Expectation of the local community increased by creating job opportunity through borrowing loan from development office. • Key indicators for evaluation were set up and they are measured. • Continuing participation by the external manpower such as university professors or experts who understand efficiency in execution of project promotes cooperation and participation among different groups including women. • By reinforcement of the local community through capacity development, several authorities of administration business are transferred to the local development office.

Table 2-55 Negative or weak point

Kermanshah province	<ul style="list-style-type: none"> • Only few capable facilitators exists. • As no big view is expected to MENARID in NRWGO, there is lack of consistency of project management and also less stability of manager. (Solution: It is necessary for the provincial manager who controls and manages MENARIS understand the project completely) • There is lack of consistency and coordination of participatory project at national level. (Solution: It is important to establish a system and technical committee at national level and to coordinate among different projects such as MENARID and JICA)
Yazd province	<ul style="list-style-type: none"> • One of the objectives of the project is natural resources management. Due to lack of coordination between province and district or no variety in strategy of implementation the objective is not perfectly filled up.(Solution: It is necessary to change the description of upper level, change from small ruminant such as goat into big ruminant such as cow, cattle breeding for better production and for this purpose execution of natural resources management especially integrated rangeland management is required) • Taking into account of establishment of model and dissemination, management of resources and budget aiming at the objective of MENARID is insufficient, as presentation of report on number of the people who are involved in cost effectiveness and the project.(Solution: It is requested to explained by report on expenses of each activity or how the project can disseminate to the other village where no MENARID activity was carried out.) • Expected objectives were not achieved due to replacement of manager at district level during the project period, negative background such as hard experience in association activities of district or village, lack of project participation awareness of the manager or maintenance of hierarchy awareness, and coordination between inhabitants and government organization or lack of consistency.

Table 2-56 Activity or measure to ensure sustainability

Kermansha province	<ul style="list-style-type: none"> • Establishment of life improvement measure and increase of income. • Clarification of land ownership • Reinforcement of voluntary and selfdependent activity by farmer themselves. • To clarify the cause of land degradation and promote the countermeasure activity. • Promotion of activity by land lease in accordance with the Law of Use and Conservation of Forest/Rangeland, the ordinance 3.
Yazd province	<ul style="list-style-type: none"> • Reinforcement of local community through credit box. • Holding workshop and meeting continuously. • To obtain trust from the inhabitant. • To legislate the strategic plan of the approved development plan.

2) Interview survey of MENARID in Chaharmahal-va-Bakhtiari province

Interview was done to the manager of MENARID in Chaharmahal-va-Bakhtiari province. Following two points are the point of interview and these ideas were confirmed through interview survey.

- i) On extension of the project from pilot to whole watershed what is more necessary for techniques or system rather than budget.
- ii) Though it is related to above i), on extension of the project how the participatory type is considered and to determine the project.

① Extension of project

There are three ideas shown hereunder. It needs to consider what kind of system is to be applied to manage in future. In case sub watershed area covers two districts, it is necessary for the staff in charge from the two districts to discuss at the coordination committee, and it was proposed that the chairman is appointed to the mayor of each district in a rotation. It is not the way to choose only one among the three ideas but it seems to be possible to combine them.

- Watershed is divided into 30 sub-watershed to cover whole province, manager is appointed in each sub-watershed area.
- There are 9 districts and watershed manager is appointed for each province. As district mayor coordinates he plays a facilitator.
- Wait for needs from the inhabitants

② About contents

Various kind of ideas under implementing or to be implemented in future were presented

- It is necessary to have a direction to conserve natural resources while securing the benefit of the inhabitants. For example activity for forest products is also emphasized. In such a case, chestnut trees, for example, are left partly in the forest for forest rehabilitation. Asking the inhabitants to understand not to do grazing or charcoal production. Putting effort to conduct reforestation by economic tree species.
- It is employed that MENARID will do anything what they can. For example, allowing use of government office building for activities, introduction of market, or preparation for extension of market, etc.
- Activities with an integrated idea for material, training, production and market. It is important to establish the production system with market oriented, and also important point considering

sustainability.

③ Methodology to implement the project

Based on the thought of participatory method the ideas are as follows.

- We employ the system that a veteran among the population conducts training to the other population. This is “dissemination from farmer to farmer” system and we think it is effective when number of the extension staff is little.
- To listen carefully a story of the person including inhabitant who has an idea and to discuss.
- To establish an association in each village and all of the population are to be the member.(this association is the condition to get loan from the fund mentioned later) The association plays a role for joint sale. Number of the association member has a Wide range from 6 to 2,000.

④ About finance of the project

Following system is under consideration to apply.

- As an initial investment government provides 80% and the population provides 20%, and activity starts. After then, continuation of the project is done by various kind of funding source including loan application.
- As for loan, if the project meets resistance economy borrowing at low interest is possible. The condition is that an association exists in a village, and the condition was set by the government. Normally association has no role if just borrowing money. (for example, there is no role for the association such as borrowing jointly under the name of association or putting fund in the association once, then the association control it) Because of the condition, it is not possible to get loan without an association. Naturally, it is possible to get loan without an association, though.
- Bank of the borrowing is not the ordinary banks. They are Omid Enterprise Fund, Imam Khomeini Relief Foundation and Welfare Fund. All of the interest rate is considerably low (Bank’s rate is generally ten several percent), maximum is 7% and it is possible to borrow by around 3%. Borrowing is carried out by house hold unit and man is a head of household, but there is a social problem that borrowing is not possible in case head of household is woman. It is said that Omid Enterprise Fund has a fund of 140 billion IRR. MENARID requested the staff in charge of Omid Enterprise Fund visit Kermansha and promote to understand activity of MENARID in order to facilitate to approve examination of the loan.

As stated above, it is thought that MENARID turns to the right direction for participatory project. Especially MENARID in Chaharmahal-va-Bakhtiari started from the extension phase that is behind of the three preceding provinces (Kermanshah province, Yazd province and Sistan-Baluchistan province), MENARID goes ahead while watching the outputs of this project, and facilitator of MENARID participate training and study tour and has been improving the capability. There is a reason why tangible outputs have been achieved at fast speed in comparison with the three preceding provinces. And this is a positive impact of this project.

MENARID focuses on system building of cooperation with other institutes, but it impressed strong that practical guidance and methodology to functionalize the system are formulated with trial and error by each NRWGO. It is therefore deemed that the project actually having participatory activities carried out in the field such as this project could be a good reference to build their methodology. Given the situation

committee of provincial level and district level that have cooperation system with other institutes do not completely functionalized and further improvement is required to functionalize it.

3) Interview survey to other institutes

Project held meetings for future cooperation with Extension section of JAO, MPO and Planning and Logistic Division of NRWGO, and conducted interview survey among them. The results are described in (3) of the meeting for reinforcement of cooperation.

(2) Holding the meeting in order to promote recognition of forest and rangeland management to the institutes concerned

Hold session aiming to getting awareness of concerned organizations on the conditions and challenges of forest and rangeland in target area. Although NRWGO is a national institute which has an authority to stop development activities in forest and rangeland, its role is not easily understood. Therefore, it is thought that it is a remote cause not to attend positively even requesting cooperation activity with external institute such as this case. For this reason, as the preparatory stage to realize cooperation, in order to NRWGO side transmit current situation, the meetings were held for the institutes concerned to recognize the situation of forest and problem. List of the events to disseminate the participatory forest and rangeland management is summarizes in the following table.

Table 2-57 List of Event for well-informing of Participatory Forest and Rangeland Management

Name of Event	Date	Target People (number)	Implementation Method	Contents of Implementation	Outputs	Remarks
Exposition for International Environment (Teheran Expo Hall)	29 Feb, 2016 to 3 Mar, 2016	Citizen, Environment NGO, Enterprise, Public organization for Environment (above 10,000 people)	Distribution of pamphlet prepared by FRWO, Display of panel and NTFP	Introduction of contents of the project	To understand deeply cooperation of Japan to the citizens of Teheran who have attention to environmental problems	To Inform on preparation of panel and pamphlet to the JICA's booth
Natural Resources Event (Shahrekord)	One week from 3 May, 2016	Staff concerned for the Provincial Government (Shahrekord), Citizens (300 people)	Explanation of JICA project at the commemorative ceremony, distribution of pamphlet, display of panel and NTFP	Introduction of activities of the project	To understand deeply other cooperation organization through discussion with participants	
Natural Resources Event (Farokhshahr city in Shahrekord district)	8 Mar, 2016	Staff concerned with education, Female junior high school student (200 women)	Distribution of pamphlet, lecture at girl's school	Introduction of project activities and action of Japan for conservation of natural resources	Children understood deeply importance of natural resources conservation as well as cooperation of Japan. Relationship between Educational organization and NRWGO became strong	
Natural Resources Week (Koohrang)	10 Mar, 2016	Staff concerned for the District Government (Koohrang), Citizens (50 people)	Explanation of JICA project, distribution of pamphlet, display of panel and NTFP at the memorial ceremony.	Introduction of project activities	Through discussion with participants deep understanding to the projects of other organization was achieved.	In the lecture of Mr. Khodaverdi who was given award because of contribution to the NRWGO's activity expressed his thanks to the project
Memorial registration ceremony for UNESCO Eco-park (Suburbs in Brujen district)	7 Mar, 2016	Citizen, Environment related public organization (City hall, DOE) (3000 person)	Distribution of pamphlet, display of panel and NTFP	Introduction of project in the memorial UNESCO registration ceremony for Brujen district, Gandman wetland.	Number of citizens understood deeply contents of the project and cooperation of Japan	Director General of Environment Agency of Iran, UNDP Representative from Iran and Provincial Mayor visited booth.
Presentation of outputs	13 Nov, 2016	Staff concerned of Provincial Government, Staff concerned of University, Environment NGO (200 person)	Presentation of activities by CP and CF, distribution of pamphlet and NTFP of project site.	Report on each activity by CP and CF.	Joint ownership of recognition for the project having been completed safely.	Evening news was televised by media.

(3) Holding the meeting for cooperation reinforcement

As for the meeting for reinforcement of cooperation, in the beginning it was a plan to reinforce cooperation with other institutes to discuss deeply on objective of cooperation, necessary method and contents. While in Chaharmahal-va-Bakhtiari province three participatory projects including this project were underway in NRWGO, i.e. MENARID project financed by UNDP, Participatory Public Land Conservation project by public land conservation division. Under such the situation it was recognized that internal cooperation is also important in order to confirm sustainability of participatory projects in NRWGO. Based on this Coordination Committee of Participatory Projects was established in NRWGO, which aims to coordinate three projects, so that the meeting in this committee was called as the meeting for cooperation reinforcement. As the activity of the committee can be considered as the same activity of Output 1, it is to be handled as the activity of both outputs, 1 and 4.

1) Meeting for cooperation reinforcement with external institutes

Regarding the meeting for cooperation reinforcement with external institutes, more Than three time discussions with MPO were carried out for budget allocation regarding participatory forest and rangeland management, and opinion exchange for the budget of people's participatory project for natural resources management and natural resources management and agriculture in JCC meeting or at the time of visit by Director General, Mr. Jalari, and regarding JAO discussion on possibility to conduct training in the village by agriculture extension office, and spot support for marketing of agriculture products in the village concerned and spot discussion on repair of pomp in Gazestan of the target village, and regarding Culture, Tourism and Handcraft Department opinion exchange with NRWGO and discussion on ecotourism and handcraft project and spot discussion on possibility to conduct project in Bazoft was carried out. Details are summarized in the following table.

2) Framework for cooperation reinforcement of inside of NRWGO

Because the need of internal cooperation came out, as mentioned above, prior to external cooperation Participatory project Coordination Committee (PCC) was established for the purpose of internal cooperation which comprises totally 20 members headed by the NRWGO Director of the Chairman, Secretary General, Director (Deputy Director) of each Division, Forest Manager and Rangeland Manager and head of concerned section or office, representatives of three principal participatory projects (JICA, National Land Conservation, MENARID) and private organization representatives. Regarding the proposed concept of the PCC was summarized in a following Fig 2-4. As the establishment and management of PCC is the related activity for reinforcement of the organization system for participatory forest and rangeland management in NRWGO, it is described in this report, so that refer to it though it belongs to the activity of Output 1.

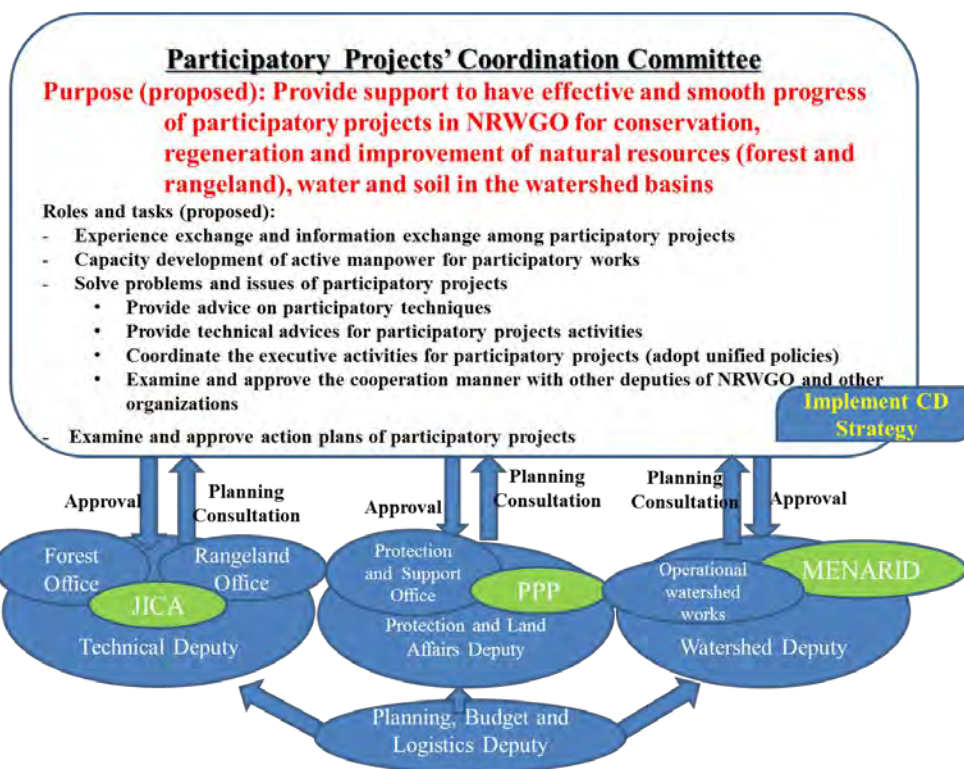


Fig 2-4 Concept of the PCC (Proposal prepared in the 2nd PCC)

Upon receiving the approval for establishment of committee meeting at the second JCC in the extension phase, articles of association and rules such as objective, member of constitution,, role, frequency of committee meeting and progress of its method was prepared and approved.

Article of the association regulates that The objective is ultimately to instruct and support the activities effectively to manage various types of participatory projects in NRWGO toward recovery, improvement and conservation of water and soil conservation and natural resources (forest and rangeland). In addition, to conduct necessary coordination in management of various type of participatory projects and to settle to be able to offer participation of the local population further more than before. The roles are finally stipulated as follows.

- *Exchange of experience and information on participatory projects
- *Ability reinforcement of the manpower for participatory project
- *Solution of problem and theme of participatory project
 - Advice for participatory technique
 - Technical advice for project activities that were planned
 - Examination and confirmation on cooperation method with internal other division and external organization
- *Inspection and confirmation of basic implementation plan of each participatory project.
- *Construction of unified implementation procedure for an appropriate case that is to be unified.
- *Application of results and outputs on implementation of the project

PCC meetings were after all held five times. Summery is described hereunder.

Table 2-58 List of PCC meetings

1 st 24 Jan. 2016	Name, member and future way of proceeding were discussed at the preparatory meeting. As for name it was “Participatory Project Management Committee” in the beginning, however it was finally named “Participatory Coordinating Committee” because it was pointed at the 2 nd JCC that the term of “management” is used for high level.
2 nd 1 Feb. 2016	Article of an association (guideline) such as objective, role and authority and administrative process (management rule) for committee holding method of committee meeting were discussed.
3 rd 23 May 2016	Discussion on article of an association and format of unified VAP of NRWGO. As for the model of VAP of RWGO participatory project, each project such as National Land Conservation project (PP project), MENARID, JICA project has carried out the activities by each form with contract of the population. Especially in case of the activities of local people in the national land considering loan of national land, a proposal was discussed that officer of Ministry of Justice conducts check and taken into account of efficiency of procedure in the government office it is better to have unified VAP of NRWGO.
4 th 15 Aug. 2016	Discussion on final approval of an article of association (refer to appendix) and Participatory Action Planning (PAP). As for discussion of PAP, regarding planning and implementation process two methodologies were discussed. Firstly, project is implemented after land-use right is directly given to the population in accordance with forest and rangeland use and conservation law, the 3 rd clause, secondarily, without giving land-use right to the population in accordance with natural resource law, the 3 rd clause, pilot project is implemented by PAP and after try and error land-use right is given to the ppeople based on natural resources law, the 3 rd clause and the project is expanded. Finally as for PAP and the 3 rd clause, it was concluded that it is necessary to use both methods according to the conditions.
5 th 4 Oct. 2016	Information sharing on case comparison was conducted between fig planting in forest restoration project in Mazerashte village (Unsuccessful case) and orchard in village development activity in JICA project. Many participants agreed with the opinion that it is impossible to simply compare, it was discussed on analysis of cause of failure in fig planting, and these issues were proposed for the most important future measure, i.e. 1) to organize the cooperative in the custom use land, 2) to transfer the all or part of the business to the population, 3) to plant commercial species as well as short term income generation species such as wild garlic.

Through discussion at such PPC CF training were organized jointly with MENARID and national land conservation project, and internal cooperation was reinforced. After MENARID participates CF training facilitator (extension staff) of MENARID works positively to the JICA project site. In addition, training for frost damage measure was also organized in collaboration with JAO and MENARID. These are appraised to be the impact of establishment of PPC and management. Regarding participatory activities it was recognized in PCC the necessity of cooperation for horizontal connection through providing subjects on which topics are to be discussed by the initiative of JICA project, and management was carried out aiming at taking adjustment by methodology of participatory activity in NRWGO. It proves that above cooperation activity is the result that the objectives are realized step by step. Therefore, it is necessary to continue to discuss in PCC and it is expected that methodology of PCC to discuss with horizontal connection might be

effective taking into account of recognition of necessity of cooperation with other organization and improvement of cooperation method.

(4) Proposal regarding reinforcement of cooperation

As for proposal regarding reinforcement of cooperation, it was at beginning to carry out a proposal regarding policy and system of cooperation. While as for NRWGO project, various project will be integrated to IWM in future, so that it is the mainstream to reinforce cooperation with other organization in IWM project. In the IWM project it is most efficient and effective for MENARID to apply cooperation system with other organization, using methodology of system construction that was developed by MENARID promotion of cooperation is achieved. Accordingly, as for cooperation system with other organization, MENARID system is to be applied. Consequently, it was judged that it is not necessary to propose policy on cooperation and system that was a plan at beginning. Taking into account of such the situation, proposal in this project is that it is made by functionalizing the system developed already and focusing on how to effectively strengthen cooperation.

Examples of four proposal are as follows; 1) to transfer the systems of MENARID effectively to IWM, 2) to be more functional mechanism of cooperation with other organization, 3) to be diversified for securing fund to promote mechanism with other organization, 4) mechanism for assorting the NRWGO projects. Details on proposals are referred to the annex.

Above proposal were presented in the 3rd JCC in the extension phase held on 24th August, 2016, and they were approved.

2.2.5.5 Problems to be solved

(1) Diversified ways of cooperation with other organizations

NRWGO has an experience in which field activities carried out in collaboration with other organizations did not go well because problems of the joint work were only discussed with executive of staff of these organization. Consequently, the project started coordinating with each operation staff of other organizations, such as JAO, etc., separately. Actual collaboration work was conducted although a large portion of its cost was born by the project. Therefore, it was understood that other organizations could collaborate with NRWGO in absence of a budgetary problem.

It is considered direction of the collaboration promotion policy proposed during the extended phase was sorted-out to a certain extent. However, it is necessary, as a first step, to appropriately categorize the types of work, in accordance with the policy, into the participatory work that can be managed by NRWGO itself and another type of work that requires collaboration with other organizations in order to meet the people's needs, depending on what is to be carried out. And that it is necessary to practice the activities and make efforts of enhancing the collaboration experience through practice trials and error.

(2) On MENARID

Regarding the MENARID operation, NRWGO collaborates with other organizations only in the field level, but not in the province level; moreover, most of the collaborative activities are actually implemented by the NRWGO budget and the financial collaboration has yet to be achieved. Since collaboration with other organizations is still at a beginning stage, therefore, it is necessary to continue practicing the collaboration work including budgetary coordination with other organizations.

(3) Internal collaboration

The activity for internal collaboration was not included in a starting plan. Because importance of

internal collaboration was acknowledged before collaborating with other organizations, however, the PCC was established in NRWGO, mainly consisting of the JICA participatory project under the Technical division, the MENARID project funded by UNDP, etc. under the watershed division and the PPP National project under the national land conservation division, which are simultaneously implemented under the jurisdiction of NRWGO.

As mentioned in the “Output 1 problems to be solved”, in order for the PCC to work well under NRWGO, it is anticipated that its office will, taking an initiative, discuss mutual problems at regular meetings and conduct adequate site visits.

CHAPTER 3 ACTUAL RESULT OF INPUT FROM JAPANESE SIDE

3.1 Actual dispatched result of Japanese experts

(1) Out country field works schedule in Iran

Table 3-1 Expert assignment in Iran

	Field	Name Organization)	Dispatch Period	Responsible Activities in PDM
1	Chief Advisor/Forest and Rangeland management(1)	Mr. Seiichi Mishima	2010/7/9/ - 2010/8/14	Responsible for the whole scope, Output1, 2, 3
2			2010/11/4 - 2010/12/23	
3			2011/2/3 - 2011/2/28 (3/1-3/7 on expense)	
4			2011/6/10 – 2011/7/18	
5			2011/10/6 – 2011/11/18	
6			2012/4/20 – 2012/6/10	
7			2012/9/14 – 2012/11/24 (11/24-11/29 on expense)	
8			2013/2/25 - 2013/3/19	
9			2013/4/17-2013/6/4	
10			2013/8/2-2013/10/26	
11			2014/5/2-2014/6/23	
12			2014/8/1-2014/8/18	
13			2014/9/12-2014/11/16	
14			2015/1/24-2015/2/13	
15			2015/4/17-2015/4/23 (4/24-5/4 on expense)	
16			2015/10/6-2015/12/13	
17			2016/4/22-2016/6/10	
18			2016/7/11-2016/9/2	
19			2016/11/2-2016/12/16	
1	Vice Chief Advisor / Institutional Strengthening and Coherence	Mr. Kazuhisa Kato	2015/9/5-2015/10/15	Responsible for the whole scope, Output4
2			2016/1/6-2016/2/8	
3			2016/8/2-2016/8/30	
4			2016/11/25-2016/12/16	
1	Sub Chief Advisor/ Participatory Forest & Rangeland Management (2)	Mr. Atsushi Hisamichi	2010/7/16 – 2010/8/14	Responsible for Output2, 3
2			2010/10/4 – 2010/12/2	
3			2011/6/21 – 2011/8/2	
4			2011/9/12 – 2011/10/28	
5			2012/2/21 – 2012/3/11	
6			2012/5/20 – 2012/7/13	
7			2012/10/2 – 2012/10/31	
8			2013/4/12-2013/5/24	
9			2013/10/1-2014/12/9	
10			2014/4/27-2014/5/19 (5/20-5/23 on expense)	
11			2014/8/15-2014/10/3	
12			2015/1/12-2015/2/7	
13			2015/9/5-2015/11/13	
14			2015/11/27-2015/12/26	
15			2016/1/16-2016/3/15	
16			2016/4/8-2016/6/11	
17			2016/9/10-2016/12/8	
1	Participatory Community	Mr. Gholamhossein	2010/9/19 – 2010/10/18	Responsible for Output2,
2			2010/11/14 – 2010/12/23	

3	Development (1)	Shokohifard	2011/1/3 – 2011/1/22	3			
4			2011/7/7 – 2011/8/15				
5			2011/11/10 – 2011/12/1				
6			2012/2/21 – 2012/3/15				
7			2012/4/12 – 2012/5/7				
8			2012/8/23 – 2012/9/13				
9			2013/4/8-2013/5/8				
10			2013/8/19-2013/10/1				
11			2014/1/19-2014/2/15				
12			2014/6/16-2014/7/9				
13			2014/10/5-2014/10/24				
14			2015/11/9-2015/12/8				
15			2016/6/6-2016/7/5				
16			2016/9/21-2016/10/20				
1			Participatory Community Development (2) / Project Coordinator(Assistant of Chief Advisor)		Ms. Saori Takei	2010/7/9 – 2010/8/14	Responsible for Output2, 3
2						2010/9/10 – 2010/11/11	
3	2010/11/24 – 2010/12/23						
4	2011/1/31 – 2011/2/26						
5	2011/6/10 – 2011/8/25						
6	2011/9/25 – 2011/12/5						
7	2012/4/2 – 2012/5/31						
8	2012/7/22 – 2012/8/16						
9	2012/9/23 – 2012/11/24 (11/25-11/29 on expense)						
10	2013/2/25-2013/3/19						
11	2013/4/1-2013/6/4						
12	2013/8/2-2013/9/14 (7/20-8/1 on expense)						
13	2013/11/29-2013/12/9 (10/21-11/28, 12/10-12/12 on expense)						
14	2014/4/26-2014/6/23						
15	2014/9/12-2014/11/18 (11/19-12/5 on expense)						
16	2015/1/5-2015/1/15 (1/16-2/13 on expense)						
17	2015/4/17-2015/5/2 (5/3-5/14 on expense)						
18	2015/9/5-2015/10/29						
19	2015/12/22-2016/2/19						
20	2016/5/2-2016/6/20						
21	2016/7/24-2016/10/11						
22	2016/11/7-2016/12/16						
1	Capacity Development/Training(1)	Ms. Osman Atif	2010/7/16 – 2010/8/14	Responsible for Output1			
2			2010/9/23 – 2010/11/6				
3			2011/6/10 – 2011/7/25				
4			2011/10/4 – 2011/11/1				
5			2012/9/7 – 2012/11/10				
6			2013/8/9-2013/11/1				
1	Capacity Development (2)	Mr. Shoichi Yamashita	2010/9/23 – 2010/10/24	Responsible for Output1			
2			2011/2/3 – 2011/2/28				
3			2012/2/21 – 2012/3/13				
4			2012/4/20 – 2012/6/2				
5			2013/4/1-2013/5/9				
6			2014/5/9-2014/5/28				
7			2014/10/2-2014/11/10				
8			2015/1/6-2015/2/5				
9			2015/9/5-2015/10/29				
10			2016/1/16-2016/3/15				

11		2016/5/2-2016/6/15	
12		2016/9/29-2016/11/17	

(2) In country works schedule

Table 3-2 Expert assignment in Japan

	Field	Name (Organization)	Dispatch Period	Responsible Activities in PDM
1	Chief Advisor/Forest and Rangeland management(1)	Mr. Seiichi Mishima	2010/7/1 - 2010/7/5	Responsible for the whole scope, Output1, 2, 3
2			2015/8/22,23,25,26,29,30,31, 9/3,4,5	
1	Sub Chief Advisor/ Participatory Forest & Rangeland Management (2)	Mr. Atsushi Hisamichi	2013/4/8-2013-4/11	Responsible for Output2, 3
1	Accompany with training/ Advance and after work	Mr. Seiichi Mishima, Ms. Saori Takei	2014/1/15-2014/2/19	C/P training in Japan
2			2014/7/15-2014/7/19	
3			2014/8/1-2014/8/15	
4			2014/9/1-2014/9/5	
5			2016/4/1, 4-16, 18-22, 25	
6		Mr. Atsushi Hisamichi	2016/7/27,28, 8/1,2,3,8	

3.2 Actual result of equipment and/or machines for operation to be transferred

Materials and equipment indicated in the particular specification in a contract between JICA and JICA consultant, major hand carry commodities and additionally purchased commodities for Bazoft office and for Training room have listed as below.

Table 3-3 Commodity item - mentioned in the particular specification of JICA/JV contract -

No.	ITEM	DESCRIPTIONS	QUANTITY	No. in NRWGO
1	Desktop computer	Case black, CPU:2.8GHz, HDD: 80GB , CDR/DVDR SONY, OS: Windows 7 Professional, MS Office 2007	1	1112
2	Monitor	19 inch, LG FRATRON W1942	1	1113
3	Keyboard	TSCO	1	1114
4	Laptop computer with battery and PC bag	Dell Vostro 3500, color silver, RAM 2.00GB , i3 , 32bit, CPU:2.27 GHz , CDR/DVDR Monitor:15 inch, OS: Windows 7 Home Premium	2	1140, 1115
5	Laser printer (color)	HP, Color Laser jet 5550 - Size:A3,	1	1135
6	Laser printer (mono)	HP. P2035n , Size A4 , monochrome, 25ppm	1	1139, 1200
7	Copy machine	SHARP. AR 2120J , Copy size max A3, monochrome, zoom 50%~200% , Feeder ,	1	1136

		Sorter, .20ppm		
8	Projector	Optoma EP7155 : (SVGA) 1024x768, 2500ANSI Lumens, Weight: 1.4 kg	1	1140
9	Project screen	150X150 cm	1	1138
10	Monitor	LG, black, FRATRON w2053s	3	1061-1063
11	Desktop computer	VANIA Case, Assembled: CPU: Core2Duo 7500 RAM:2GB VGA;Geoforce GT210 1GB Red HDD:500GB, DVD: R/W ASUS 24W	3	1064-1066
12	Key board	FARASSO	3	1067-1069
13	Projector	SHARP, XR-55X	1	1070
14	copy machine	SHARP. AR.M420U. Copy size max A3, mono, zoom 50%~200% , Feeder , Sorter.40ppm	1	1191

Table 3-4 Commodity item -Hand carry-

No.	ITEM	DESCRIPTIONS	QUANTITY	No. in NRWGO
1	Telefax	Sharp, white color	1	1137
2	Modem	TP-Link, white color	1	1138
3	GPS	Garmin e-trex vista cx	2	1109, 1110
4	Camera with battery, bag, accessory	CANON Powershot sx301 (PC1560), black color	1	1131
5	Camera with bag	CANON Powershot A810, silver color	1	1132
6	Camera with bag, battery&charger	CANON Powershot A810, silver color	1	1133
7	Telephone	Panasonic, with extension, black color	1	1134
8	Tripod	SLIK 800G-7	1	1137
9	Phone	Technical TEC-5821, brown color	1	1111
10	Mobile NOKIA	black	1	1135
11	Mobile NOKIA	black	1	1136
12	Soil trowel	Yamanaka style	1	1041
13	Durometer	Yamanaka style	1	1042
14	pH meter		1	1043
15	GPS with battery and charger	GARMIN 62SJ, Japanese, 4GB memory, 2000point, Auto Route	1	1108
16	Altimeter		1	1044
17	Hand level		1	1045

18	Steel measure	50m	1	1046
19	Tape measure	20m	3	1047-1049
20	Pole	white and red	1	1101
21	Diameter measure	5m	1	1102
22	Box leveling rod	measure for hight of trees	1	1103
23	Stapler	big, red color	1	1104
24	Tape measure	5m	3	1105
25	Spring scale	50kg	1	1106
26	Caliper	wooden	1	1107
27	White boaed	2m*1m, iron stand with wheel	2	1055, 1056
28	Desk	wooden, with wheel, white color, 1.5m*1m	8	1047-1054
29	Chair	plastic, orange color	36	1021-1046
30	Gas heater	Mahyan	2	1057, 1058
31	Book shelf	MDF	2	1059, 1060
32	Locker	iron, doble door	2	1071-1072
33	Documment locker	iron, 3stage	3	1073-1075
34	Cloth hunger	iron, stone base	2	1076-1077
35	Electric fan	SUNNY, with iron pole	2	1078-1079
36	Tea samovar	GOSONIC	1	1080
37	Documment locker	iron, 3tage	2	1192, 1193
38	Generator	HANSA HG1500	1	1194
39	Locker	iron, doble door	1	1195
40	Bolt cutter	NOVA, blue color	1	1196
41	UPS	Faratel made in Iran, SM1250, while color, 12V, Battery x2, 7.5 A.	2	1197, 1198
42	Handy spray 18litre	18 litre, Garden Guard, made in China, Knapsack sprayer	1	1199
43	Cloth hunger	iron pole, stone base	1	1171
44	Folding chair	blue color	2	1117, 1118
45	Documment locker	iron, 3stage	1	1172
46	Kitchen cabinet	9m	1	1181
47	Refregerator	Philiver	1	1182
48	Kitchen hood	Dorsa	1	1183
49	Electric heater	ALONSA, AL-1104-HH, 1200w	1	1173
50	Bookshelf	brown color, MDF	1	1174
51	Cloth hunger	iron pole, stone base, brown color	2	1175, 1176
52	Cloth hunger	plastic, color brown	1	1177
53	Electric sweeper	Panasonic, MC-YL691, made in Malasya	1	1178

3.3 Actual local expenditure

Necessary field operation budget contents include ① Manpower cost of Japanese and Iranian experts; personal cost, travel / daily allowance, lodging cost, ect. ② Real spendings for field activities; forest and rangeland activities expenditure, community development expenditure, staff training ③ Project management expenditure; interpreter, office maintenance, ec..Japanese Input total on ② and ③ of the above expenditure from 1st to 5th year and extended year are summarized as table below.

Table 3-4 local expenditure (unit: thousand Japanese Yen)

Item	Project year						TOTAL
	1st year	2nd year	3rd year	4th year	5th year	extended year (*5)	
Local costs for Output1 (*1)	---	---	---	---	---	2,096	
Local costs for Output2 (*1)	0	5,116	4,108	4,897	2,089	174	
Local costs for Output3 (*1)	0	2,574	2,439	3,315	5,261	4,478	
Local costs for Output 4 (*1)	837	680	1,300	2,899	2,476	118	
SUBTOTAL	837	8,370	7,847	11,111	9,826	6,866	44,857
Provision of equipment	796	0	0	0	0	0	796
Other Sub-contract	2,010	441	2,496	0	1,090	0	6,037
Hiring local staff	5,085	4,337	5,694	7,250	7,927	14,031	44,324
Other expenditures (*2)	4,546	2,470	3,588	5,646	4,284	4,275	24,809
Training in Japan (*3)	1,740	1,599	1,668	3,253	2,031	2,588	12,879
TOTAL (*4)	<u>JP¥ 15,014</u> <u>(IRR 1,836,737,690)</u> (JPY1=IRR122.335 as of Dec 2010)	<u>JP¥ 17,217</u> <u>(IRR 2,372,933,025)</u> (JPY1=IRR137.825 as of Dec 2011)	<u>JP¥ 21,293</u> <u>(IRR 3,139,461,213)</u> (JPY1=IRR147.441 as of Dec 2012)	<u>JP¥ 27,260</u> <u>(IRR 6,604,389,240)</u> (JPY1=IRR242.274 as of Dec 2013)	<u>JP¥ 25,158</u> <u>(IRR 5,920,054,770)</u> (JPY1=IRR235,315 as of May 2015)	<u>JP¥ 27,760</u> <u>(IRR 7,083,047,280)</u> (JPY1=IRR255.153 as of Dec 2016)	<u>JP¥ 133,702</u> (≒IRR 25,411,023,298)

*1: before PDMver.4 (1st to 5th years), included actual cost of outputs :Specifically, Output 2 of PDMver.4 is Forest and rangeland management activity, Output 3 is a Community Development activities and Output 4 is staff training. And Output 1 of PDMver.8 is staff training, Output 2 is Community Development activities (CF training), Output 3 is Forest and rangeland management activity and Community Development activities, Output 4 is Co-operation Activity.

*2: Includes consumable supplies, equipment maintenance, transportation, car rental, communication cost, documents translation, correspondence expenses, and miscellaneous.

*3: Non-includes airfare (Iran - Japan) and travel allowance in Japan. And non-includes cost of translation for training material from 1st year to 3rd year.

*4: The rates used to work out the corresponding amount in Iranian currency are quoted from OANDA.

*5: Undecided about amount of extended years on January 2017.

CHAPTER 4: PROBLEM, LESSON AND RECOMMENDATION

4.1 Idea on Implementation, point of attention

Since beginning of the project in 2010 the Japanese project team has carried out the activities taking careful attention to the following points.

(1) Understanding to the country condition of Iran

Because Iran takes republican form of Islam it follows Islamic law and protects Islam very momentarily. Therefore, the team tried to understand Islam deeply and respected Islam related events when the activities were carried out in the government office of NRWGO. While Persian culture is breathing in a country, so that the team has taken special consideration to the convention of the country.

(2) Respect to the social culture of the target village in Chaharmahal-va-Bakhtiari Province

The Islam Council that is called “Shora” has a strong influence to the society, but the influence by racial tribe is strongly left in the mountains of Zagros area, so that the team carried out activities with coordinating both Syora and tribal elder.

Especially Bazoft are in Chaharmahal-va-Bakhtiari Province, the target village of the project, is located in the place of Bakhtiari which has a long history of nomadism. Culture and tradition of Bakhtiari has maintained and developed while adjusting natural condition under isolated and semi-arid area in the mountains, and culture and custom have not been changed in a flow of modernization.

The team respected that but there were lots of invisible problems among tribal groups became obstacle during the project period and after continuation of respect it happened that a traditional event has changed to a new idea.

As the state of affaires of each village have a wide variety, selection of CF, for example, or execution of activity in a village were carried out without taking a unified method that fell into a model but corresponding to the specific condition of each village flexibly.

(3) Activity with women

As mentioned above, the country follows Islamic law and women are isolated differently from men. Thereby woman expert was located in order to women do activities as easy as possible, and consideration was made in order for the women to choose the activity according to their conditions.

(4) Idea to implement with the staff of NRWGO

This project is a technical transfer project and the activities are carried out in collaboration with Iranian experts while Japanese experts conduct technical transfer. There was much trouble in the beginning of the project to visit the site with CP of NRWGO as they were assigned to both ordinary duties of the government office and project activities.

After philosophy and objective of technical cooperation was explained patiently to the Iranian side, thereby they understood and very good relationship was constructed among the experts of both countries and project activities were implemented. By this it is thought to be that more effective technical transfer and satisfaction by the experts were achieved.

4.2 Lesson regarding implementation of the project

Through implementation of the project activities for six and a half years following lessons were extracted.

(1) Reinforcement of capacity of organization, training related to the staff

Actual state and problems:

Participatory project of JICA was carried out in technical division in NRWGO in Chaharmahal-va-Bankhitiari Porvince, PPP in throughout the national land and MENARID project in watershed division, and each division apply participatory approach under each mandate.

Tackles and Results:

Regarding strengthening of organization, it is important for not only organization but also person by person to be reinforced of their capacity. Therefore, various kind of training was carried out for all staff in the project. Through such the process three kinds of participatory projects have been carried out in Chaharmahal-va-Bankhitiari Porvince, so that there were opportunities to apply contents of training and participatory techniques to meet the objective were practiced and utilised. It maybe said that participatory approach became mainstream in whole NRWGO after such the flow came out.

Lesson that is aplicable for others:

It is important for each section to adjust the participatory approach that meets their objectives as each section works within each jurisdiction. Execution of reinforcement of capacity of each manpower belongs to the organization of NRWGO is required and an opportunity for the capacity reinforced manpower is also required to exercise to solve problem at each section which trained trainees belong to.

② Increase of training opportunity for local staff with many relation with local people

Actual state and problems:

Through execution of staff training following points are clarified. Present staff employ system regulates staff retires after 30 years services, but there is luck of staff to supplement the number of retirement, thereby number of staff decreases. With decrease of staff, old and middle age staff who has business knowledge and techniques decrease, it is difficult to secure lecturers in the office who conduct OJT for transferring business knowledge and techniques to the young successors.

Regarding the staffs of NRWGO district office it was found that they had lack of techniques and skills for participatory approach as well as practical knowledge for national land management and also tools for duties (survey equipment and measure to move).

Tackles and Results:

In the second half of the project more attention was paid for capacity reinforthment of the staff of head office and assurance of opportunity of training for the site staffs who have many chances to get contact with the local people. In order to promote participatory system based on the region it was more effective training. For example, trainings for; usage of GPS, how to prepare report, measure against forest fire, nursery management, were conducted. And training for facilitator focusing the young staffs for extension, etc. was also conducted.

It seemed that gathering trainees was not easy to conduct part of staff training carried out in Shahrekord using the field of Bazoft, and efficiency of training was poor due to remote area.

Lesson that is applicable to others:

As technical transfer is difficult to the young people by OJT method from the veterans, it should be required for NRWGO to establish training system to improve capacity for the site staffs who have

many relations with local people especially young staff. In the system it is important to include not only the training for participatory techniques but also control method for illegal use for national land management, project for border definition, forest fire control, tree breeding, seedling production, training for spot for communication capacity, site inspection with many field practices. It is also required to prepare training texts, install necessary equipment and facility to apply the techniques to the actual business. Regarding the venue of training, training executor needs to consider to choose the place to get a better training effect to meet the objective.

As the remaining issues there are some staffs among the local site staffs, who are appointed to the extension staff or being in charge for extension works, and they attend training for extension staff and facilitator. So that upper level needs to coordinate other business in order to facilitate the staff

to work positively for the on-site business using current participatory approach.

(2) Implementation system in the target village

① Optimum scale of group formation at execution of each activity

Actual state and problems:

NRWGO has a rule to choose an organization which is able to accept the public works depending on the scale or characteristics of the works, and it is a rare case to conduct a small scale of the work with a group of local people. It is considered as people's participation through implementation of project with local cooperative. However, at the initial stage of the project, there was few active cooperative which had a good relation with NRWGO in the target village.

Tackles and Results:

It is not the target for this project to start with establishment of the association whose process is time consuming or reestablishment of association, but to newly organize joint operation group with more than several people who have a will to participate the activity (in case of a land use project there are many cases to organize the group by land owners) taking into account of the objective of support for activity cost, coordination of interest on the land use project, possibility of execution of project, exclusion of support for specific individuals and future prospect as a main actor of the project, and VAP was contracted to be a cooperation target of the project.. Therefore, the activity which starts quickly and works flexibly was realized.

As for payment to the guard for the protected area, it was found that contract of employment was separately decided by NRWGO, a part of the payment was disbursed by forest section as the project expense through many kinds of discussion with NRWGO in the extension phase taking into account of sustainability of project activity.

Lesson that is applicable to others:

There is a many kinds of contract such as a large-scale construction and a small scale for sewing in forest and rangeland activities that cooperate with local population, and in accordance with the scale, it is necessary to identify the group of population as quick and smooth as possible that is able to implement. Especially, in case the project is a large scale and requires a high technology there is a construction which is contracted by only the private company which is related to the association or registered, but in a case project scale is small and local population is able to receive benefit, first action needs to be early to achieve the outputs early, then it is necessary to proceed the forthcoming activities smoothly. In such the case, village group with several members (private organization).is to be certified as a qualified group under a certain condition, and it will be effective to put a measure as a supporting object.

NRWGO will continue to order a certain amount of works such as irrigation, nursery

management, etc. To the same organization, thereby capacity of implementation as a business trust group can be improved.

As for the project related to land, it is thought group formation by land owner is smoothly proceeded to get agreement on execution and implement the project rather than targeting the association. As for land issue, it is important to clarify especially obligation and right of both sides by document.

② Measure for sustainable activity in the village

Actual state and problems:

Government of Iran has invested large amount for basic infrastructure to Bazoft area such as road, waterworks, communication, but it is not sufficient for industrial development. Income of population is shared by migrant worker, farming or wheat cultivation by rainwater depending on the land. And other job opportunity is few and unemployment rate was high. Therefore, promotion of local industry and activity of alternative living means related to increase the opportunity of cash income are welcomed.

Because of no budget item for above activity for NRWGO due to its division of duties, extension and instruction works after the project completion must be taken over by JAO, TVTO and Provincial government which are originally responsible government, however each government has low priority to implement project in Bazoft area, as an actual state, there is very few extension activity carried out in Bazoft area at any component.

Tackles and Results:

JICA project introduced five activities to the five target villages, i.e. orchard establishment, apiculture, wild celery sowing as a forest and rangeland activity and rural development activity. Though investment to each activity was small it was expected that Iranian side puts fund to implement for various needs of the village after completion of technical transfer, and there is a constraint for JICA side for funding. In either project, they started after late 2nd and it needs around seven years to be an income source for actual base except short term apiculture, so that continuous instruction for dissemination from the government side and patience of the population are required. As for the extension and instruction works after the completion of the project it is to be managed by basically agriculture department, vocational training center or provincial government which are responsible for this issue, due to there is no budget allocated for above activity among division of duties of NRWGO, any of government office concerned puts less priority to conduct extension activity in Bazoft district.

As for the budget of activity costs sharing for necessary expense were clarified between project side and VAP group, then activities have been carried out. However, unexpected situation appeared after the project started and there were lots of requests of input to the project came out.

After completion of the project, although VAP was contracted that NRWGO and working group concerned succeed the content of implementation items, but there was short of initial investment fund to expand a business by applying the knowledge obtained by the project or implement by population's initiative, so that it is necessary to arrange fund. However, it is not easy to receive bank loan because project site is located in a remote mountain area and there is few bank.

Lesson that is applicable for others:

Three components of management are at least necessary, i.e. human, substance and money. As for human, development of CF was done, and as for substance, concrete activities were introduced, and regarding money, input by project was carried out. In order to continuously conduct rural activity necessary item is money after completion of the project. In Bazoft of mountain area micro credit

activity by reserving of self-fund is effective because no financial service developed there.

As a remaining problem and a proposal for it is that it is important for NRWGO to introduce micro credit activity and the growing support continuously. And it is necessary to cooperate with the originally responsible government in order to increase sustainability of activity, so that NRWGO needs to take action forwardly to the government agencies concerned from view point of importance of regional development in Bazoft area, and also conduct sale and marketing activities in collaboration with other organization.

(3) Appropriate technology

① Smooth security of land for project implementation under the complexity on interest of the land.

Actual state and problems:

Right of use of the population is subdivided by inheritance and document of title (signature joint ownership form) used to be retained without specification of place. Because of this, small area of several ha or less than one ha becomes target area for public project and much time is spent to confirm by the land owner that there is no problem to conduct the project although the working group in the village is selected and it was not easy to secure suitable land for protected area for regeneration of forest and rangeland and alternative land for income generation activity.

If the land is bigger securitized land owner increases, it affects largely to coordinate land use issue and it tends to increase possibility to exist person who has complaint to others.

Tackles and Results:

At the site selection for possibility of implementation, degree of mutual trust among land owners and solidarity were ascertained. It is important to pile up cycles such as; preliminary survey for selection of the target area, formulation of agreement among the villagers concerned, formulation of planning among the villagers, implementation of project, evaluation with the villagers and feedback, in order to establish trust with the villagers, and through the project implementation local people could understand that cooperation with NRWGO brings benefit, thereby it proved that wider trust could be developed.

Lesson that is applicable to others:

It is necessary to ascertain mutual reliability among land owners and solidarity degree of them on choosing the possible implementation site. On executing the project for forest and rangeland management whatever the project is direct management of NRWGO or people's participation, it seems to take one or two years for preparation period to confirm the project site. Therefore, it is necessary for NRWGO to secure the budget for preliminary survey and set up the period for preliminary survey instead of rushing to search project implementation site immediately after securing the budget. For this purpose it is necessary to secure re-estimated securing of budget and its sharing is necessary. It is necessary for NRWGO to choose the village that is easily obtain understanding from the land owners where new project starts.

② Regeneration of forest and rangeland by primarily natural regeneration techniques

Actual state and problems:

Regarding the method of regeneration of forest and rangeland in Bazoft district it was explained in the first and 2nd project year by the staff of NRWGO concerned that it must be done by natural regeneration and the complete regeneration period is seven years.

Tackles and Results:

Because of this the project's technical subject on setting the protected area for participatory

project was natural regeneration, and protected area for regeneration of forest and rangeland was set up, guard was employed in the target village and natural regeneration of oak which is a dominant species of the area was surveyed. The results are as follows.

1) Target people claimed land use right as much as possible and ignored the justice of the government to conduct the project in the national land under their responsibility or it seemed that they refused it, so that the project focused on mainly site negotiation with land owners and spent much time, and there was not enough time to consider the technical issue.

2) It was proved that maintenance of protected area by employing guard is possible, and as for the natural regeneration which is the technical subject of the project, restoration of grass species was confirmed within two to three years. As for tree species such as oak only germination and seedling growth up to 10 cm height was confirmed. Regarding maintenance of protected area by paying the guard, because of poor sustainability of the activity by the population the alternative planting of economic species were introduced, but the profit has not yet provided.

3) It was said that natural regeneration needs seven years, but it seemed there is no data to prove the fact in the forest in Zagros area. According to the survey result in the protected area at the five pilot villages, it was found that the possibility for completion of natural regeneration in seven years was actually very low, and more time was necessary. Practical knowledge and techniques such as tree breeding (silvicultural techniques), earth and sand outflow and flood measures (erosion control), rainwater catchment system (technique of efficient use of water) etc. have not been commonly applied in the area.

Lesson that is applicable to others:

On execution of land use management project such as setting the protected area and maintenance, coordination work among landowners mainly on the talks with population and examination works of appropriate techniques to the area are both considered to be important. It is requested that NRWGO develops a monitoring system as an official investigation work in NRWGO as a first step, and it is activated.

In order to do that, as a remaining problem and its proposal is that NRWGO is requested to promote training for NRWGO staff as well as leader group of the village such as CF to be able to apply site matching techniques, silvicultural technique, small scale erosion control technique, investigation research for efficient water use technique and accumulation and maintenance of data that are basic technical base for sustainable forest and rangeland management done by the population. And increase of training opportunity for the local people to improve their technical capacity is also needed.

(4) Others

① Dissemination and public information of the project

Actual state and problems:

NRWGO head office has materials for publicity but local NRWGO do not have the materials, because of less necessity of publicity.

Tackles and Results:

Regarding newsletter and HP, necessary works were done. The newsletters from No.1 to No.10 were handmade and simply compiled, and they are easily able to reprint in a short time by an office printer upon request so that they are very manageable. They were used in a various cases. NRWGO has public information to be distributed, but most of internal summary document for public information were not maintained due to less necessity felt by the staff of NRWGO level at the district and local office level.

According to the public relation section regarding sending information to TV and Newspaper (paper and Web) information was positively provided since outputs of the project could be presented visually at the later period of the project. Simultaneously, FRWO/NRWGO invited positively to the related organization the seminar and workshop of the project.

Lesson that is applicable to others:

Corresponding to the progress of the project activity and to the step of setting up the extension material necessary budget and manpower for public information of the project are to be included to the work plan. After clarifying the position of public information of the project to the Iranian side, by provision of information source to the public relation section extension and public information activity was preceded smoothly.

At the district level of NRWGO if the documents are prepared to show simply the natural resources of the area and the project of NRWGO to the people who visit the office, they can be utilized to ask the people to participate the project.

As need of public information is high, it should be prepared by the initiative of Iranian side.

4.3 Recommendation to promotion of participatory forest and rangeland watershed management in the future in Islamic Republic of Iran

Based on the findings achieved in 6 and a half year of the project implementation period, proposals on policy level are extracted. It shall be noted that, because of following recommendations are opinion of the project expert, Iranian initiatives are expected for its development and implementation.

(1) System side and technical aspect

Actual state:

In Iran NRWGO which is a landowner of national land manages almost all boundary control of national and private land, and also in charge of administrative works corresponding to the land conservation for public benefit (carbon fixation, soil conservation, water resources conservation, biodiversity, etc.), as only three staffs of Bazoft office manage more than 100,000 ha of national land, it is apparently under the serious condition, i.e. manpower is short and the environment does not allow the authorized land manager to be functional. Therefore, degradation of surface ground vegetation and denudation have advanced caused by illegal cultivation and illegal over grazing aiming at private profit of the local people live in the national land. Although financial authority of the central government and congress men have authority to the system of the country and budget, they have not supported sufficiently the management administration for the purpose of national land conservation in the national land of NRWGO.

While if the national land management for public purpose is done by out-sourcing to conduct any kind of project in an area by the government and in case the scale is large and design trust or contract construction is carried out, a company organization which has a tender qualification or a cooperative which are authorized legally are the target of selection, and in principle selection is done by tender. In the case of such an implementation method public works project is not given in trust in the mountain area where social infrastructure has not yet been installed without company and cooperative, and profit flows out the village, and job opportunity decrease, then it does not contribute for local promotion in a short time, so that it prevents sustainable forest and rangeland management.

From the technical point of view, it seems that there is a space to enhance cost- effectiveness of the works by accumulation of techniques. In case of the works which deal with land it is absolutely necessary to accumulate and analyze the examination survey data based on land specification and

conduct training to apply the site matching techniques.

For example, regarding the rational and effective method of regeneration for forest and rangeland, explanation based on examination data and preparation of specification of construction contract are necessary. It seems there is lack of material for explanation to cover whole works in accordance with the examination data of the site.

Recommendation:

If land use is planned in the national land, the issue on the right of land ownership becomes problem. As for main constituent of land management, government (NRWGO or other related administration organization), local administration organization such as province, village, family line (old owner), people having a pasturage are possible targets. In order to facilitate management of forest and rangeland in national land, it is necessary to rearrange the right of land and clarify the main constituent of management.

In the place where it is called the national land it should be considered for the government to make execution by proxy if improper land management is done, and to do this it needs to be considered to take measure to secure finance by means of “establish of tax for land use planning management and levy”.

- ① To supplement the capacity by new employee after old staff retirement, to prevent further decrease of the number of staff. And responding Iranian peoples life time is and will be longer than before, so fixed 30 years officials work period employment system at present shall be reformed to rearize more long work period for officials.
- ② To improve treatment of staff such as wage, allowance, living environment and office environment substantially so that the staff can work in a remote area in the mountain like Bazoft.
- ③ Absolute number of staff is short even decrease of number of staff is prevented. In order to supplement the shortage it is necessary to bring up and train the duty trustees and business entities which have certificate, responsibility and authority to assist the staff, and necessary to secure the budget for business consignment.
- ④ To upgrade capacity of the registered staff so that they become capable to instruct and control the duty trustees.
- ⑤ To develop a standard to effectively use the limited budget and to identify the prioritized execution site for national land conservation measures, and to make a figure of budget, staff allocation and execution site, and to conduct conservation measure.

As for the business consignment, it is necessary to create the following system for public construction taking into consideration of local promotion under the premise of implementing the participatory project.

- ① Regarding the entry qualification for public construction, creation, reformation or interpretation of laws to enable duties ordering to the local people in the target area of construction or arbitrary corporation organized by the local people which meets a specific condition.
- ② Examination of the way of ordering in order to create an opportunity to participate in the village by means of minimizing lot of duty order, making smaller sum or adding portion of cost sharing.
- ③ It is required to develop a system to promote local organization to grow up by distributing small scale of works continuously by the division construction ordering system for plural year instead of big scale construction ordering system for one year. For example, although small scale if continuously construction order is received the contractor can employ the people continuously

and also maintain to attend the local coordination works related to the works. When the harvest season comes people are engage to crop sales so that issue of employment and function of coordination works are settled. It is thought that such the system would be one of the step to sustainably manage forest and rangeland by local organization.

As for the technical aspect, it is necessary for NRWGO to have scientific knowledge without confusing by the conventional technique as it is a government organization of techniques. Therefore, steady improvement is required over the whole organization management such as holding presentation of techniques and research, development of system of accumulation of techniques by making implementation guideline or technical manual, good treatment measure to the engineers, budget for technical development, promotion to learn techniques by personnel rotation.

Through accumulation of such the scientific techniques introduction of agroforestry in mountain area addressed by the expert, imposing surcharge from the water users in downstream area and stability of techniques would be confident.

(2) Financial source and law

Actual state:

As for present Iranian for forest related law and regulation, it is said that they were made by referring the humid forest along the Caspian Sea. Though upper level of law exists there is no preparation of implementation guideline of systematic law and regulation regarding forest and rangeland which local staff can understand. Therefore, it was a fact that it could not be understood without asking the authority of NRWGO every time regarding the related Iranian law and regulation when project was executed.

Allocation of the project budget was not stable throughout the project period, trouble occurred for disbursement of travel expenses for the CP to visit the site. As for the participatory works it is important to proceed the project by face to face communication with the people, thereby mutual trust was built, and to do so it was required to stably secure the budget for minimum travel expenses and for securing vehicle.

Securing the budget is indispensable for NRWGO to continuously conduct the project works and for national management works of NRWGO (boundary control of national land, use control of national land, watershed management), and also to conduct participatory project in other area of the province.

Recommendation:

It is necessary to prepare implementation guideline of law and regulation which is applicable to the forest excluding coastal area of Caspian sea, but especially for Zagros mountains area, and improve one after another.

In addition, it would be necessary to take measure to proceed to maintain laws which are similar to the mountain village promotion law for the mountain area in Zagros, such as taking measures for industry promotion in the mountain area by authority and budget of FRWO/NRWGO. On extension and instruction works for agro-pasture-forestry in the mountain area such as Bazoft area, necessity and importance of regional development is explained to the originally responsible government offices such as JAO,etc., and it is necessary to push to carry out positively, and NRWGO becomes capable to maintain the system of staffing, dealing, training, organization, regulation, and distribution of project

budget, then it would not be impossible to implement each of them as part of the business of NRWGO.

Regarding the cost of participatory project, it is necessary to secure the budget stably through the central government or province in order to secure trust of the population. It is thought that after FRWO create the laws related to forest and rangeland maintenance and secures stably the project budget based on the law, stable budget distribution to NRWGO and also to the provincial government becomes possible.

APPENDIX

- APPENDIX 1 Minutes of Meeting (M/M) 1st JCC (Extended Phase)
- APPENDIX 2 Minutes of Meeting (M/M) 2nd JCC (Extended Phase)
- APPENDIX 3 Minutes of Meeting (M/M) 3rd JCC (Extended Phase)
- APPENDIX 4 Minutes of Meeting (M/M) 4th JCC (Extended Phase)
- APPENDIX 5 Capacity Development Strategy (Farsi)
- APPENDIX 6 Proposals for strengthening cooperation with other organizations
for institutional coherence
- APPENDIX 7 Executive Instruction of Participatory Projects Coordination
Committee
- APPENDIX 8 Guideline on Participatory Forest and Rangeland Management
Project
- APPENDIX 9 Reference.
 - (1) Project activities in the field of forest and rangeland
management from 2011 to the end of extension phase
 - (2) The actual condition and problem of activities
at each model protected area in each year

APPENDIX 1

Minutes of Meeting (M/M)
1st JCC (Extended Phase)

**MINUTES OF MEETING
ON
1st JOINT COORDINATING COMMITTEE
FOR
THE PARTICIPATORY FOREST AND RANGELAND MANAGEMENT PROJECT
IN EXTENDED PHASE IN CHAHARMAHAL-VA-BAKHTIARI PROVINCE**

This document has compiled referring to the contents and abbreviations of R/D, PDM/PO, Minutes of Meeting of JCCs and The Work Plan. Abbreviations are as attached in ABBREVIATIONS.

JICA contracted with a Joint Venture to implement "The Participatory Forest and Rangeland Management Project (Extended phase) in Chaharmahal-va-Bakhtiari Province, in the Islamic Republic of Iran". FRWO/NRWGO-JICA expert team has conducted cooperation activities since July 2010 to June 2015, based on the R/D, PDM, PO and MM of serial JCCs, and which of period was extended until December 2016 by the Minutes of Meeting dated 11 March 2015. Contents of the project were mutually agreed as PDM/PO for the extended phase discussed in the 8th JCC of the project in 30th April 2015.

The first JCC in extended phase was held on 13th October, 2015. In the JCC, firstly series of speeches were given by participants. Then Mr. Mishima, Chief advisor of the project, presented the summary of Work Plan and submitted the Work Plan draft and the Monitoring Sheet ver.0. Before commencement of his presentation, Mr. Mishima explained that the Work Plan draft on extended period has been already discussed between NWGO C/Ps concerned and JICA project team, and mostly agreed the Work Plan draft which is submitted to the JCC. In the discussion session, many topics have been discussed among the participants, such as collaboration with relevant organizations, making model for dissemination, Integrated Watershed Management in 6th 5year development plan, budget, sustainability, participatory technical committee or office suggested by Mr.Mishima, internal coordination, etc....

As results of the JCC, both side confirmed and agreed on the Work Plan and also agreed that to exchange mutual opinions will be continued among all the project members and relevant organizations.

The agenda and attendances of 1st JCC of Extended Phase are attached as ANNEX I, the presentation of the summary of the Work Plan by M.Mishima (in Farsi and in Japanese) is attached as ANNEX II.

Four (4) copies of Minutes of this meeting, written in English, was prepared, confirmed and signed by following four (4) representatives of concerned parties.

SHAHREKORD, 17 October 2015

Japanese side

Mr. Seiichi MISHIMA
Team Leader, Ir-J PFRMP, JICA

Iranian Side

Mr. Parviz Garshasbi
Project Director, IrJ-PFRMP
Deputy for Watershed Management, Rangeland and Desert
Affairs, FRWO

(Witness)

Mr. Kohei SATO
Chief Representative, JICA Iran Office

Mr. Ali Mohammadi Moggadam
Project Manager, IrJ-PFRMP
Director General, NRWGO of Chaharmahal-va-Bakhtiari
Province

ABBREVIATIONS

No.	Abbreviations	Name (English)
1	APO	Annual Plan of monthly Operation
2	C/P	Counterpart
3	CD	Capacity Development (CD)
4	CF	Community Facilitator
5	FRWO	Forest, Rangeland and Watershed Management Organization
6	DOE	Department of Environment
7	ICR (DF)	Inception Report (Draft)
8	IrJ-PFRMP	The Participatory Forest and Rangeland Management Project in Chaharmahal-va-Bakhtiari Province in the Islamic Republic of Iran
9	IRR	Iranian Rial
10	JAFTA	Japan Forest Technology Association
11	JAO	Jihad-e-Agriculture Organization
12	JCC	Joint Coordinating Committee
13	JICA	Japan International Cooperation Agency
14	JOFCA	Japan Overseas Forestry Consultants Association
15	JOT	Joint Operation Team
16	MENARID	Integrated Natural Resources Management in the Middle East and North Africa
17	M/M	Minutes of Meeting
18	MOJA	Ministry of Jihad-e Agriculture
19	NRWGO	Natural Resources and Watershed Management General Office of Chaharmahal-va-Bakhtiari Province
20	PDM	Project Design Matrix
21	PO	Plan of Operation (Quarterly base)
22	PRA	Participatory Rural Appraisal
23	R/D	Record of Discussions
24	SCI	Sanyu Consultants Inc.
35	UNDP	United Nations Development Programme
26	VAP	Village Action Plan
27	WS	Workshop

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ANNEX I Agenda and attendances of 1st JCC of Extended Phase

- ✓ **Date** 13 October, 2015 (Tuesday) <21 Mehr, 1394>
- ✓ **Venue** JAO Meeting Room, Shahrekord
- ✓ **Time** 9:30-13:22
- ✓ **Agenda** Chairperson: Mr. Garshasbi

Time	Contents	Presenter
9:30- 9:34	Quran, Anthem (5 min)	projector
9:34- 9:39	Hadith	Mr. Hoseini (clergy)
9:39- 9:41	Opening address (5 min. FA+JP)	Mr. Mohanmadi Moggadam (Project Manager)
9:41- 10:07	Speech (26 min, FA+JP)	Mr. Garshasbi (Project Director)
10:07- 10:14	Speech (7 min, FA+JP)	Mr. Ameri, Head of the Management and Planning Organization (MPO) in Charmahal Va Bakhtiari Province
10:14- 10:22	Speech (8 min, Fa+JP)	Mr.Gharib, Director General of JAO
10:22- 10:32	Speech (10min. FA+JP)	Mr.Gheibi (Head of Out of North Forests Center in FRWO)
10:32- 10:42	Speech (10min. FA+JP)	Mr. Yukihiro (JICA Iran Office)
10:42- 11:28	Presentation on Work plan for extended phase (50min. JP+FA)	Mr. Mishima (Chief advisor)
11:28- 12:48	Discussion (80 min. FA+JP)	Attendances
12:48- 13:22	Closing remarks (15min. FA+JP)	Mr. Garshasbi (Project Director)

- ✓ **Handouts**
 1. Agenda <English>
 2. Presentation handouts < Persian/ Japanese>
 3. Work plan draft <Persian /English /Japanese>
 4. Monitoring Sheet ver.0 <English>

✓ **Attendances**

Forest, Rangeland and Watershed Management Organization (FRWO)

- | | | | |
|---|---------------------------|---|-------------------------|
| 1 | Mr. Parviz Garshasbi | Deputy of Watershed, Rangeland and Desert section | Project Director |
| 2 | Mr. Mohamad Aghighi | Director General of Soil Conservation and Erosion Control in Watershed Deputy | Project Deputy Director |
| 3 | Mr. Fariborz Gheibi | Director General of Out of North Forests Center | |
| 4 | Mr. Hossein Ali Mohammadi | Forest Expert, International Project Section, Deputy for Watershed Management | Project Coordinator |
| 5 | Mr. Jalal Bagheri | Expert in Charge of Out of North Forests Center | Iranian Expert |

Natural Resources and Watershed Management General Office (NRWGO)

of Chaharmahal-va-Bakhtiari province

- | | | | |
|---|------------------------------|---|------------------------|
| 1 | Mr. Ali Mohanmadi Moggadam | Director General of NRWGO | Project Manager |
| 2 | Mr. Gholamhossein Nasiri | Deputy for Technical Affairs | Deputy Project Manager |
| 3 | Mr. Alimohammad Mohammadi | In charge of International Projects | Iranian Expert |
| 4 | Mr. Hosein Bahrami | Watershed Deputy | Iranian Expert |
| 5 | Mr. Seyyed Mohammad Hosseini | Representative office of Supreme leader | |
| 6 | Mr. Seyfollah Aali | Security | |
| 7 | Mr. Bahram Abdollahi | Manager of Budget, Plan & Program | |
| 8 | Mr. Fakhroddin Karimzadeh | Expert of Secretary of Director General | Iranian Expert |

3

9	Mr. Shahram Jazayeri	Head of Forestry office	Iranian Expert
10	Mr. Mohammadreza Mohammadi	Head of Rangeland Office	Iranian Expert
11	Mr. Hamid Mahinpoor	Secretary of Technical Committee	Iranian Expert
12	Mr. Farzad Rezazadeh	Expert of Watershed office	Iranian Expert
13	Mr. Alireza Mardanian	Expert of Watershed office	Iranian Expert
14	Ms. Arezoo Banihashmi	Head of protection office	Iranian Expert
15	Mr. Rahman Tavakoli	Head of Land Assessment office	Iranian Expert
16	Mr. Hooman Khakpoor	Head of Extension Office	Iranian Expert
17	Ms. Maryam Rahnvard	Expert of Extension Office	Iranian Expert
18	Mr. Vafa Mahmoodi Nejad	MENARID- Executive manager	
19	Mr. Masoud Ghaedamini	Expert	

Government Office of Chahalmahal-va-Bakhtiari Province

1	Mr. Esmail Ameri	Head of MPO
2	Mr. Iraj Akbari	Expert of budget and planning office
3	Ms. Azar Makvandi	Public relation

Jihad-e-Agriculture of Chahalmahal-va-Bakhtiari Province (JAO)

1	Mr. Gharib	Director General
2	Mr. Khaled Taheri	Plant Production Expert
3	Mr. Changiz Khoshgva	Manager of Animal Husbandry Affairs
4	Mr. Ebrahim Koochaki	Manager of Poultry and honey bee dept.
5	Mr. Hojatolla Raisi	Deputy of Extension dept.
6	Mr. Teimur Bagheri	Cooperation office manager
7	Mr. Alireza Valipour	Cooperation office expert
8	Mr. Roohollah Saeedi	Office of mobilization for Construction and Network of Extension executors
9	Mr. Hamid Salehi zadeh	Public relation
10	Mr. Yaser Bagheri	Public relation
11	Mr. Hashem Gholami	Public relation

Agriculture & Natural Resources Engineering Association (NREA)

1	Mr. Mohamad Abdollahi	Head of (NREA) CH&B
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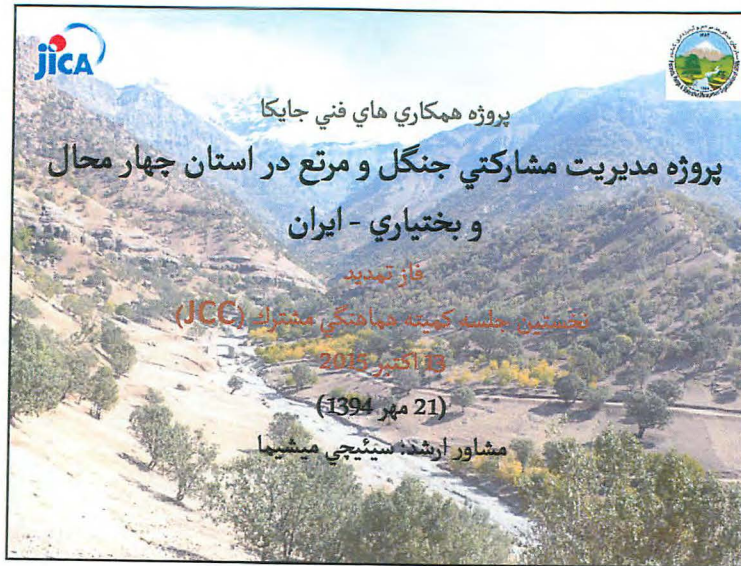
Japan International Cooperation Agency (JICA)

1	Mr. Hideki Yukihiro	Project Formulation Advisor
2	Ms. Rosita Fakhrevaezi	Planning expert

JICA Project Team

1	Mr. Seiichi Mishima	Participatory Forest and Rangeland Management	Project Chief Advisor
2	Mr. Kazuhisa Kato	Institutional Strengthening and Coherence	Deputy of chief advisor
3	Mr. Atsushi Hisamichi	Participatory Forest and Rangeland Management	
4	Mr. Shoichi Yamashita	Capacity Development/ Training	
5	Ms. Saori Takei	Participatory Community Development	Project Coordinator
6	Mr. Mehdi Goodarzi	Interpreter	
7	Mr. Hajjatollah Sherafat	Interpreter	
8	Mr. Shahin Arab	Interpreter	
9	Ms. Mojgan Mehparvar	Interpreter	

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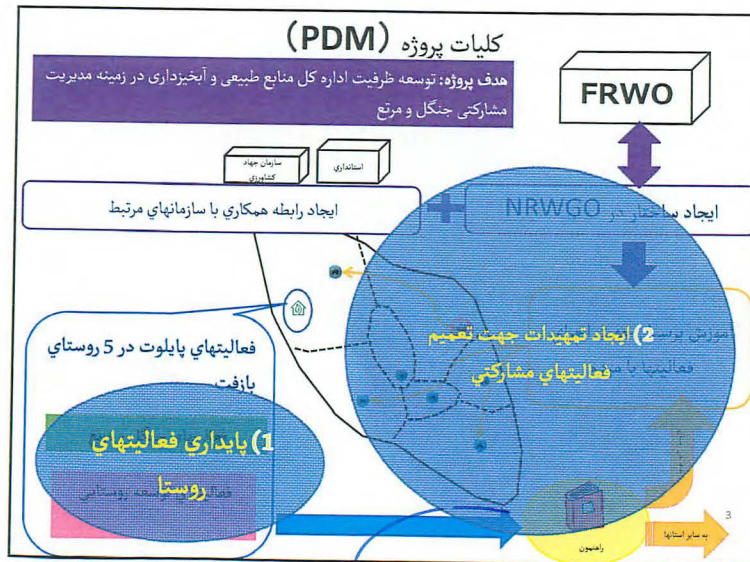
پیشنهادات تیم ارزیابی پایانی

ارزیابی مثبت:

- رابطه مثبتی بر اعتماد با مردم ایجاد شده است.
- خروجی های فعالیتهای پروژه رو به ظهور نهاده است.

چالش های پیش رو که باید در قبال آن اقدام متقابل اتخاذ شود:

- ناکافی بودن منابع انسانی، ساختار تشکیلاتی اداره کل منابع طبیعی و آبخیزداری
- پایین بودن پایداری پایلوت های الگو
- توسعه و ارتقاء الگوی قابل تعمیم مدیریت جنگل و مرتع



منظور از توسعه ظرفیت چیست؟

این مبحث به فرایند ارتقاء توانمندی حل مسائل و مشکلات در سطوح فردی، سازمانی و اجتماعی و .. اشاره دارد.

||

یافتن شیوه مشارکت متناسب با طرح ها و پروژه های NRWGO در داخل این اداره از طریق آزمون و خطا در اجرای پروژه های پایلوت مربوط به فعالیتهای مشارکتی.

○ نمونه پروژه های پایلوت

پروژه های پایلوت جایکا در بازفت

پروژه حفاظت مشارکتی (اداره امور اراضی)

فعالیتها و اقدامات اداره جنگل و اداره مرتع

منارید (معاونت آبخیزداری)

2 رهیافت مشارکت

رهیافت مشارکت جهت نیل به اهداف تعیین شده در خط مشی ها (اهداف سازمانی)

- تشریح اهداف مد نظر در خط مشی ها (اهداف سازمانی نظیر حفظ مناطق ترق و ... برای مردم. دستگاه اداری برای رسیدن به این اهداف ، تحت توافق مردم ، اعتبار مالی اولیه را آورده و مردم فعالیتها را اجرا می کنند (فهرستی از فعالیتها قابل انجام وجود دارد)
- نوعی از قرارداد با هدف ایجاد رابطه بر-برد برای دستگاه اداری و مردم (دو طرف وظایفی دارند).
- بهره گیری مستقیم در راه نیل به اهداف سازمانی (خط مشی) دستگاه های اداری

به کدام نسبت؟

پروژه هایی از نوع پروژه های اداره امور اراضی؟

6

توسعه مشارکتی (توسعه منطقه ای)

- هدف ، به کمال رساندن موضوع توانمندسازی مردم از نظر شناسایی مشکلات زندگی توسط خودشان و بحث ، تصمیم گیری ، اجرا و ارزیابی توسط ایشان است.
- اجرای عملی موضوع اولویت دادن به افرادی که در آخر قرار دارند
- بیرونی به مرحله آخر (Putting the Last first) ، تمویق دیدگاه افراد
- نیل به اهداف سازمانی دستگاه های اداری ، مستقیماً به موضوع ارتباطی ندارد. (هرچند در مواردی در نهایت به این اهداف منجر می شود)

مشارکت؟

یا

محدوده هر پروژه در حیطه وظایف سازمانی NRWGO



اراضی مد نظر NRWGO

سازمان

معاونت آبخیزداری

رویکرد اصلی فعالیتهای فاز تمدید (رئوس کلی برنامه کاری)

- 1) **ساختارسازی جهت اجرای فعالیتهای پایدار در دستگاه اداری، بالخصوص در اداره کل منابع طبیعی و آبخیزداری = ایجاد تمهیدات جهت تعیین فعالیتهای مشارکتی به سایر مناطق**
- ← اصلاح راهبرد توسعه ظرفیت NRWGO در برگزیده دستگاه تعیین شده
- ← برگزاری دوره های آموزشی بمنظور توسعه ظرفیت پرسنل NRWGO
- ← اصلاح راهنمون جهت تعمیم به سایر مناطق

خروجی PDM 1

2) تأمین پایداری فعالیت ها در روستاهای هدف

- ← تقویت ساختار جهت تداوم فعالیتها توسط خود مردم
- ← حمایتها جانبی توسط دستگاه اداری بمنظور انتقال فعالیتهای خود مردم

3) همکاری با ارگان های ذیربط

- ← پیشنهاد همکاری با توجه به سطح فعالیت ها
- ← حمایت از بهره برداری از سیستم همکاری ها توسط منارید

رویکرد اصلی فعالیتهای فاز تمدید (رئوس کلی برنامه کاری)

- 1) **ساختارسازی جهت اجرای فعالیتهای پایدار در دستگاه اداری بالخصوص در اداره کل منابع طبیعی و آبخیزداری = ایجاد تمهیدات جهت تعمیم فعالیتهای مشارکتی به سایر مناطق**
- ← اصلاح راهبرد توسعه ظرفیت در برگزیده دستگاه تعمیم راهبرد تقویت توانمندی مدیریت مشارکتی جنگل و مرتع در NRWGO
- ← برگزاری دوره های آموزشی بمنظور توسعه ظرفیت پرسنل NRWGO مطابق با ساختار ایجاد شده
- ← اصلاح راهنمون جهت تعمیم به سایر مناطق

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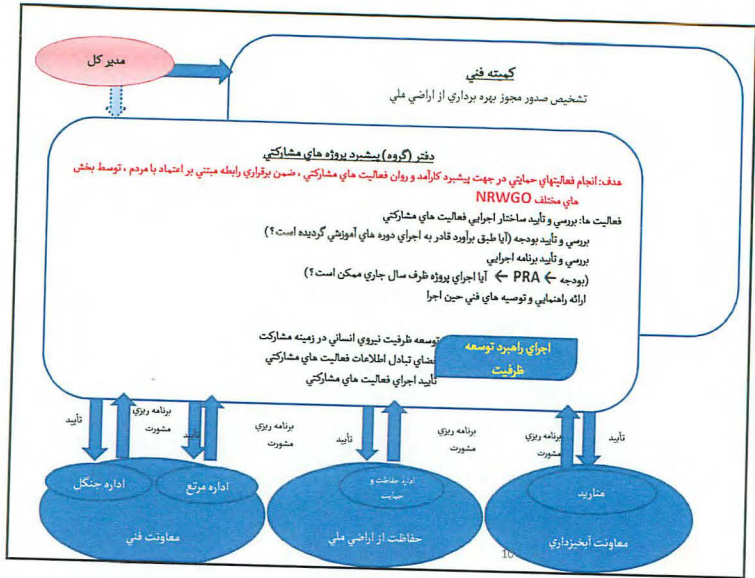
3) همکاری با ارگان های ذیربط

- ← پیشنهاد همکاری با توجه به سطح فعالیت ها
- ← حمایت از بهره برداری از سیستم همکاری ها توسط منارید

پیش نویس نسخه اصلاحی راهبرد توسعه ظرفیت در برگرفته دیدگاه تعمیم راهبرد تقویت توانمندی (توسعه ظرفیت) مدیریت مشارکتی جنگل و مرتع در NRWGO

1- سیاست و سوی تعیین شده توسط مشارکت (مفهوم اعمال) / بکارگیری فعالیتهای مشارکتی	در راستای حفظ سرزمین (اراضی ملی) و بهره‌برداري پایدار از این اراضی، درک مردم از حفاظت از اراضی ملی و مدیریت پایدار منابع طبیعی و نیز جلب مشارکت ایشان در این فعالیت‌ها ضروری است. در پی پروژه، شیوه مشارکت مناسب با ویژگی‌های بخش (فرد واحد) شناسایی شود.
2- روش شناسی	
1-2- فعالیت‌های پایلوت (جزا در مرصه)	حین اجرای طرح‌ها و پروژه‌های پایلوت، از بین آنها، اطلاعات لازم برای اجرای پایدار و مداوم طرح‌ها و پروژه‌های مشارکتی NRWGO - ذخیره می‌شود.
2-2- تربیت نیروی انسانی	آموزش کارکنان (آموزش ضمن خدمت در طرح‌های پایلوت، بازآموزی‌های میدانی، آموزش دانش)
3-2- تأمین اعتبار مالی	محیط‌های کلیدی انجام داده و به صورت برنامه‌ریزی شده، تقاضای بودجه می‌کنند. همچنین در خصوص فعالیتهای مشارکتی خارج از حیطه طرح‌ها و پروژه‌های جاری که NRWGO شمولی آن می‌باشد نیز، ترتیبی داده می‌شود که در حد امکان بخشی از بودجه مالی لازم برآورد و تأمین شود تا این اداره بتواند بدون وابستگی به سایر ارگان‌ها و به طور مستقل آنها را انجام دهد. برای آنکه اعتماد مردم از دست ندهیم، در هر مرحله از کار، از میزان احتمال یا درصد تحقق بودجه اطمینان حاصل کرده و برای مردم شفاف می‌شود.
4-2- همکاری (همکاری در سطح ملی، همکاری بین‌سازمانی)	(اطلاعات) فعالیتهای که هر یک از بخش‌ها انجام می‌دهند ذخیره سازی و بازنگری شده و به اشتراک گذاشته می‌شود تا ربرینای همکاری متقابل ممکن ایجاد گردد. مشارکت به عنوان سرمدار فعالیتهای مشترک بر همکاری بین سازمانی تقویت شده و روابط لازم برای اجرای فعالیتهای مشارکتی با همکاری NRWGO و سایر ارگان‌ها برقرار می‌گردد.
3- ایجاد ساختار دورن NRWGO جهت اجرای فعالیتهای مشارکتی پایدار	اجرای راهبرد توسعه ظرفیت = از ابتدای دفتر پیشبرد پروژه‌های مشارکتی که دارای کارکنان زیر می‌باشند: توسعه ظرفیت نیروی انسانی در زمینه مشارکت، منصوب اجرای فعالیتهای مشارکتی، ایجاد فضای تبادل اطلاعات در زمینه فعالیتهای مشارکتی، ارائه توصیه‌های فنی در زمینه مشارکت.

← تدوین برنامه اجرایی بر اساس راهبرد توسعه ظرفیت توسط NRWGO



نحوه پیشبرد اصلاح راهبرد توسعه ظرفیت

- کار اصلاح تا دسامبر 2015 (آذر ماه 1394) انجام می‌شود.
- نظرات بخش‌های ذیربط به قدر کافی در آن منعکس می‌شود.
- مضمون آن آزادسازی می‌شود (در اختیار عموم افراد مربوطه) قرار می‌گیرد.
- همچنین، همزمان با اصلاح راهبرد توسعه ظرفیت، اقدامات زیر در قالب فعالیت‌های پروژه انجام می‌شود:
 - 1- حمایت از طرف ایرانی برای تهیه برنامه اجرایی راهبرد توسعه ظرفیت
 - 2- تأمین پایدار فعالیت‌های بازفت
 - 3- آموزش جهت تربیت نیروی انسانی مجری فعالیت‌های مشارکتی
 - 4- به اشتراک گذاشتن اطلاعات فعالیت‌های مشارکتی
 - 5- ارائه توصیه‌های فنی به پروژه‌های مشارکتی توسط تیم پروژه جایکا
 - 6- حمایت از فعالیت‌های همکاری سایر ارگان‌های منارید

آموزش توسعه ظرفیت کارکنان مناسب با ساختار (ایجاد شده)

- همگام با عملیات تدوین سند مکتوب راهبرد توسعه ظرفیت طبق مفاهیم طرح پیشنهادی راهبرد توسعه ظرفیت، برنامه اجرایی آموزش کارکنان نیز تهیه می‌شود.

اهداف:

- تربیت نیروی انسانی جهت تعمیم مدیریت مشارکتی جنگل و مرتع در سایر مناطق توسط کارکنان
- بالا بردن سطح توانمندی کارکنان ادارات منابع طبیعی بخش‌ها به عنوان دریچه ارتباط مردم

فعالیت‌ها:

- تیم عملیاتی مشترک که از خروجی‌های این پروژه بهره‌بردار می‌کند (هدایت کارکنان جوان توسط کارشناسان هم‌تا در سبک مربی)
- آموزش قریبانان جنگل در شهرستان‌ها و بخش‌ها بمنظور ارتقاء توانمندی کار عملی
- دانش افزایی از طریق بازدیدهای آموزشی

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توسعه الگوی تعمیم مدیریت جنگل و مرتع و اصلاح راهنمون

اصلاح راهنمون تعمیم مدیریت مشارکتی جنگل و مرتع

- ◆ انعکاس خطی مشی FWRO/NRWGO (در راهنمون)
- ◆ جلسات هماهنگی با تیم تدوین راهنمون در NRWGO
- ◆ انعکاس آموزه ها از طریق اجرای فعالیتهای در 5 روستای پایلوت
- ◆ بازدید از استان های حوزه زاگرس و برگزاری جلسات بحث و گفتگو با ایشان
- ◆ ایجاد روش و فرآیند ملیوس جهت اجرای مدیریت مشارکتی جنگل و مرتع

برگزاری کارگاه آموزشی راهنمون

تشریح نسخه اصلاحی راهنمون برای افراد ذیربط در ادارات کل منابع طبیعی حوزه زاگرس (که بیشتر با آنان دیدار صورت گرفته)

پس از اتمام کار اصلاح راهنمون

اجرای پروژه تعمیم به سایر استان ها توسط سازمان جنگل ها ، مراتع و آبخیزداری کشور (FRWO)

دوره های آموزشی مد نظر

- آموزش تربیت تسهیگر
- انتخاب افراد کاندید برای تسهیگری مشغول شدن در پروژه های مشارکتی که توسط NRWGO اجرا می شود.
- ← توسعه ظرفیت از طریق فعالیت در تیم عملیاتی مشترک
- ← به اشتراک گذاشتن اطلاعات توسط تسهیگران در بین خودشان
- آموزش قربانیان جنگل
- تعیین مسائل و مشکلات
- برگزاری کلاسهای آموزشی جهت حل مشکلات (قوانین و مقررات ، GPS ، گزارش نویسی و ..)
- بازدید
- برگزاری بازدید میدانی از پروژه های مشارکتی با محوریت حضور افرادی که تا کنون موفق به شرکت در این بازدیدها نشده اند.
- تهیه اسناد مکتوب از خروجی های پروژه جهت اطلاع رسانی و روابط عمومی
- تهیه برنامه برای بازدیدهای داخل و خارج استان

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رویکرد اصلی فعالیتهای فاز تمدید (رئوس کلی برنامه کاری)

1) **ساختارسازی جهت اجرای فعالیتهای پایدار در دستگاه اداری بالاخص در اداره کل منابع طبیعی و آبخیزداری = ایجاد تمهیدات جهت تعمیم فعالیتهای مشارکتی به سایر مناطق**

- ← اصلاح راهبرد توسعه ظرفیت NRWGO در برگزیده دیدگاه تعمیم
- ← برگزاری دوره های آموزشی بمنظور توسعه ظرفیت پرسنل NRWGO مطابق با ساختار ایجاد شده
- ← اصلاح راهنمون جهت تعمیم به سایر مناطق

2) **تأمین پایداری فعالیت ها در روستاهای هدف**

- ← تقویت ساختار جهت تداوم فعالیتهای توسط خود مردم
- ← حمایت های جانبی توسط دستگاه اداری بمنظور انتقال فعالیتهای خودمختار

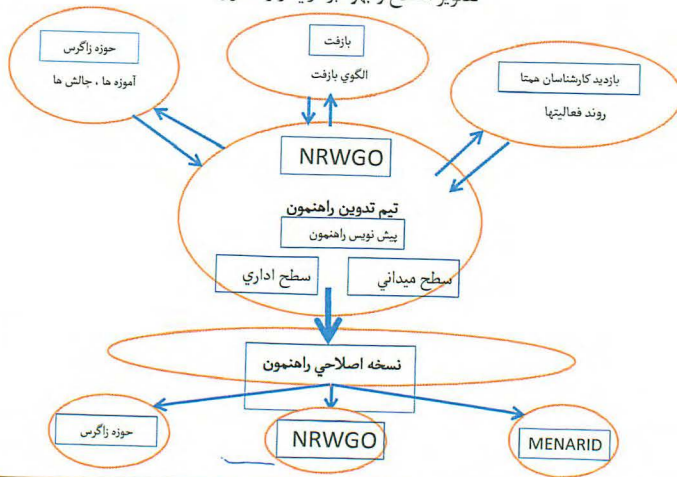
فعالیهایی مربوط به خروجی های 2 و 3 PDM

3) **همکاری با ارگان های ذیربط**

- ← پیشنهاد همکاری با توجه به سطح فعالیت ها
- ← حمایت از بهره برداری از سیستم همکاری ها توسط منارید

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تصویر اصلاح و بهره برداری از راهنمون



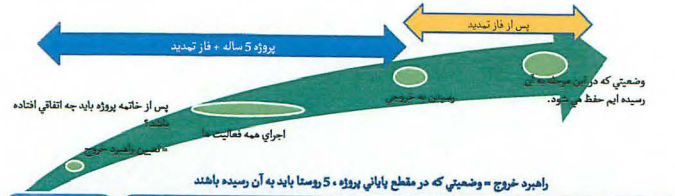
فعالیت های خروجی PDM 2

ساختار اجرایی جهت مدیریت مشارکتی پایدار جنگل و مرتع در 5 روستای منطقه بازفت ایجاد و تقویت می شود.

- تربیت مردم و تشکل ها در حد امکان منظور از تشکل مردمی قادر به همکاری با دستگاه اداری چیست (آیا این تشکل ها می توانند سفارش اجرایی طرح ها و پروژه های عمومی را قبول کنند؟ آیا مشمول دریافت کمک و یارانه می شوند؟)
- واگذاری اراضی ملی به صورت اجاره و نظارت بر آن
- توسعه ظرفیت تسهیلمان اجتماعی
- جلسات هماهنگی و برقراری ارتباط ، آموزش تسهیلمان اجتماعی
- جستجوی روش تأمین سرمایه متناسب با منطقه
- گذاشتن اطلاعات در اختیار رابطین دستگاه های اداری ذیربط

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راهبرد خروج جهت حصول پایداری در 5 روستای پایلوت منطقه بازفت



راهبرد خروج = وضعیتی که در مقطع پایانی پروژه ، 5 روستا باید به آن رسیده باشند

فعالیت در اراضی ملی (محدوده های قرق)	بدون هزینه کردن برای قرق بان ، مردم خودشان قرق ها را حفظ می کنند.
فعالیت در اراضی ملی و خصوصی	مردم ، فعالیت های مدیریت جنگل و مرتع را که در طول پروژه شروع شده (البته به جز پایش احیاء) ادامه می دهند. به منظور حصول پایدار اجزاء جنگل و مرتع در آینده ، همچنین برای تعیین و برون فون احیاء پوشش گیاهی در آینده در سایر مناطق توسط NRWG این اداره کل ، مناطق احیاء پایش را به نحو شایسته حفظ می کند.
فعالیت های غیر وابسته به زمین یا فعالیت در اراضی دارای مالکیت خصوصی	اراضی اجیرهای کوچک واقع در حوزه حکم های احداث شده ، حفظ می شود. تراس بندی اراضی رومی حفظ می شود.
فعالیت های غیر وابسته به زمین یا فعالیت در اراضی دارای مالکیت خصوصی	روستاهای میکن ساز، نادوم فعالیت های توسعه روستایی توسط خود مردم (منابع مالی ، ارتباط با ادارات مربوطه ، گروه یا تشکلهای مردمی ، مشوره فزونی و نظارتی) ایجاد می شود.
فعالیت های غیر وابسته به زمین یا فعالیت در اراضی دارای مالکیت خصوصی	برای ایجاد تنوع در ابزار معیشتی مردم برنامه ریزی صورت گرفته ، ریسک درآمدی مردم کاهش یافته و می توان مسیر معیشتی به کاشش فشار بر جنگل را نایبه نمود.

فعالیت های خروجی PDM 3

ارتقاء فعالیت های مدیریت جنگل و مرتع با مشارکت مردم در 5 روستای پایلوت منطقه بازفت

- تهیه پیش نویس VAP ، مذاکره و حصول توافق بر سر آن
- اجرای فعالیت های مندرج در VAP
- پایش و ارزیابی و بازخورد فعالیت ها توسط افراد شرکت کننده در اجرای VAP

فعالیت های توسعه روستایی	فعالیت های جنگل و مرتع
بازاریابی	حفظ قرق ها (جنگلکاری اقتصادی ، کاشت گیاهان وحشی و گیاهان دارویی ، پرداخت حقوق قربانان با شرایط)
بازتأسیس صندوق های خرد در قالب صندوق های سرمایه در گردش	پایش احیاء
پایش صندوق های اعتباری خرد در قالب صندوق های پایش	پایش حکم های کوچک و تراس بندی ها انداز
دانش فنی تکمیلی در زمینه مدیریت باغ (از قبیل فنون تکثیر و ...)	ایجاد محدوده های آزمایشی به طور ثابت
حمایت از فراوری و فروش	پایش احیاء مراتع در محدوده های آزمایشی ثابت

رویکرد اصلی فعالیت های فاز تجدید (رئوس کلی برنامه کاری)

- 1) ساختار سازی جهت اجرای فعالیت های پایدار در دستگاه اداری بالاخص در اداره کل منابع طبیعی و آبخیزداری = ایجاد تمهیدات جهت تعمیم فعالیت های مشارکتی به سایر مناطق
 - ← اصلاح راهبرد توسعه ظرفیت NRWG در برگزیده دیدگاه تعمیم
 - ← برگزاری دوره های آموزشی به منظور توسعه ظرفیت پرسنل NRWG مطابق با ساختار ایجاد شده
 - ← اصلاح راهنمون جهت تعمیم به سایر مناطق

2) تأمین پایداری فعالیت ها در روستاهای هدف

- ← تقویت ساختار جهت تداوم فعالیتها توسط خود مردم
- ← حمایت های جانبی توسط دستگاه اداری به منظور انتقال فعالیت های خود مردم

3) همکاری با ارگان های ذیربط

- ← پیشنهاد همکاری با توجه به سطح فعالیت ها
- ← حمایت از بهره برداری از سیستم همکاری ها توسط منابع

فعالیت های مربوط به خروجی PDM 4

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همکاری - جزئیات فعالیت ها

- گفتگو با سازمان جهاد کشاورزی (به منظور جویا شدن وضعیت)
- گفتگو با سازمان مدیریت و برنامه ریزی
- بررسی و تأیید شیوه اجرای کار در منارید
- برگزاری کارگاه آموزشی و ... برای کمک به درک بهتر پروژه های NRWG توسط سایر ارگان ها
- حمایت از فعالیتهای همکاری با سایر ارگان ها در منارید
- پیشنهاد طرح همکاری برای هر پروژه

22

مفهوم همکاری با سایر ارگان ها

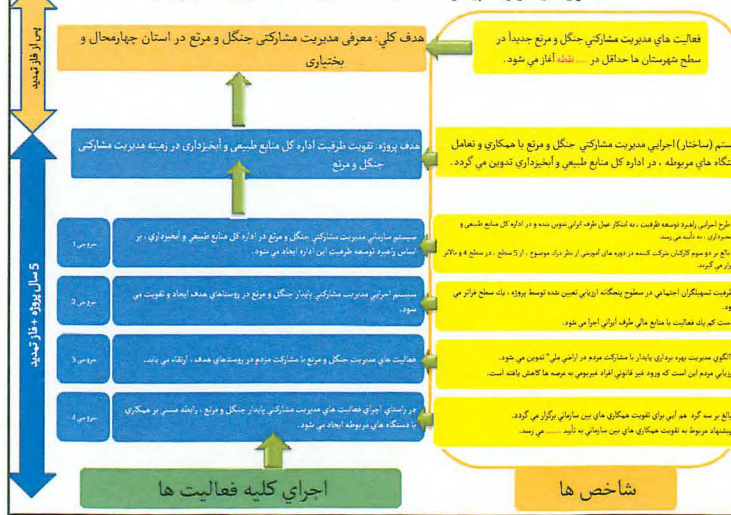


- اجرا به منظور تأمین/تضمین پایداری
- مواردی که در صورت همکاری، منجر به پایداری نمی شود
- اگر بدون همکاری، پایداری تأمین شود، مانعی ندارد
- در خصوص فعالیت هایی که در هر مرحله NRWG قادر به حمایت است (گیاهان دارویی، میوه های وحشی/کوهی و غیره)، آیا نیازی به درخواست از سایر ارگانها هست؟

بررسی همکاری با توجه به سطح فعالیت

21

حصول تأیید از روند پیشرفت فعالیت ها، طبق PDM و بر اساس پایش



برگزاری دوره آموزشی در ژاپن

دوره آموزشی اول	دوره آموزشی دوم
حذف از برگزاری دوره	تقویت رابطه همکاری با ارگان های ذیربط
زمان برگزاری و مدت دوره	تأیستان 2016 (10 روز)
محتوای دوره	سخنرانی و بازدید از نمونه ساختار ایجاد شده در ژاپن در راستای جلب حمایت مالی، تشکیلاتی و فنی استاندارد در پروژه مدیریت مشارکتی جنگل و مرتع
	تدريس اصول كلي جنگلداری و جنگلداری پایدار بازدیدهایی در حومه توکیو کلاس و بازدید در مناطق محلی نمونه مذاکره و گفتگو با پروژه کارگاه تحقیقی

انتخاب افراد برای شرکت در این دوره ها، به کارشناسان همتا محدود نشده و این افراد از بین کارکنانی انتخاب می شوند که در انجام فعالیت ها مشارکت فعال دارند، کارکنانی که در زمان های عدم حضور کارشناسان ژاپنی نیز فعالیت ها را به پیش می برند، همچنین کارکنانی که پس از خاتمه پروژه نیز به طور خودجوش و با ابتکار عمل خود، پروژه های مشارکتی را به پیش ببرند.

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فهرست کارشناسان پروژه - اکتبر 2015 (مهرماه 1394 - اکتون)

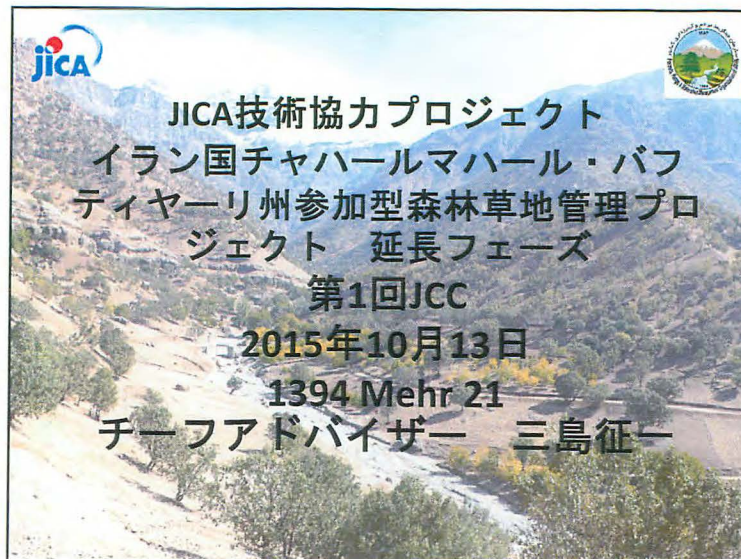
رئیس	موضوع	امری
رئیس پروژه	مشاور ارشد معاون مشاور ارشد	آقای دکتر پرویز گرنشاسی، معاون آبخیزداری، امور منابع و بیابان، سازمان جنگلها، مراتع و آبخیزداری آقای سیدمحمد شمشه آقای کاوه کاتب
معاون پروژه		آقای حمید طیفی، مدیر کل دفتر حفاظت حیات و فرسایش
مدیر پروژه		آقای علی محمدی مقدم، مدیر کل اداره منابع طبیعی و آبخیزداری
معاون مدیر پروژه		آقای لاله‌سین نصیری، معاون فنی اداره کل منابع طبیعی و آبخیزداری
هماهنگ کننده پروژه	آقای حسینی محمدی، کارشناس جنگل (سازمان جنگلها، مراتع و آبخیزداری)	معاون ساتوری تاکتی
تقویت و انسجام سازمانی	آقای علی محمدی مقدم، مدیر کل اداره منابع طبیعی و آبخیزداری استان آقای حسینی محمدی، کارشناس جنگل (سازمان جنگلها، مراتع و آبخیزداری) آقای حسین پورانی (معاون آبخیزداری)	آقای کاوه کاتب
بسیار مت - مشارکتی جنگل	مسئول فنی	آقای محسن باغی، کارشناس مسئول مرکز جنگل های شادان از شمال آقای شمیم محمدی، مسئول پروژه های بین بخشی
جنگل و مراتع	جنگل و مراتع	آقای فرزادین کریم زاده، رئیس حوزه ریاست اداره کل منابع طبیعی و آبخیزداری آقای طاهر جباری، رئیس اداره جنگل آقای حمید جهن پور، مدیر کشته فنی
مراتب بالاتر		آقای حمیدرضا محمدی، رئیس اداره مراتع
توسعه روستایی مشارکتی	آقای فرهاد رضازاده، کارشناس آبخیزداری آقای فرزانه مرادیان، کارشناس مدیریت آبخیزداری خانم آرزوی هاشمی، رئیس اداره حفاظت و حمایت	آقای دکتر لاله‌سین شکوفی فره معاون ساتوری تاکتی
توسعه ظرفیت / آموزش	آقای رحمان توکلی، رئیس اداره آموزشی آقای هوشان طاکچور، رئیس اداره ترویج و آموزش خانم مریم رضوی، کارشناس اداره ترویج و آموزش	آقای علوی باغی

نکات قابل بحث

- 1- در خصوص دفتر پیشبرد پروژه های مشارکتی مندرج در پیش نویس راهبرد توسعه ظرفیت:
 - ← ضرورت؟ ترکیب اعضا؟ اختیار تأسیس؟
- 2- در خصوص تدوین برنامه اجرایی راهبرد توسعه ظرفیت:
 - ← مسئول تدوین؟
- 3- امکان پایداری 5 روستای پایلوت بازفت:
 - ← نظرات در مورد راهبرد خروج
- 4- در خصوص همکاری با سایر ارگان ها:
 - ← نظرات پیرامون مفهوم / طرز تفکر
 - ← در خصوص فنون تولید و فروش گیاهانی که اداره کل منابع طبیعی متولی آن است
 - ← در مورد رابطه با منارید

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JICA技術協力プロジェクト
 イラン国チャハールマハール・バフ
 ティヤーリ州参加型森林草地管理プロ
 ジェクト 延長フェーズ
 第1回JCC
 2015年10月13日
 1394 Mehr 21
 チーフアドバイザー 三島征一

終了時評価調査団の提言

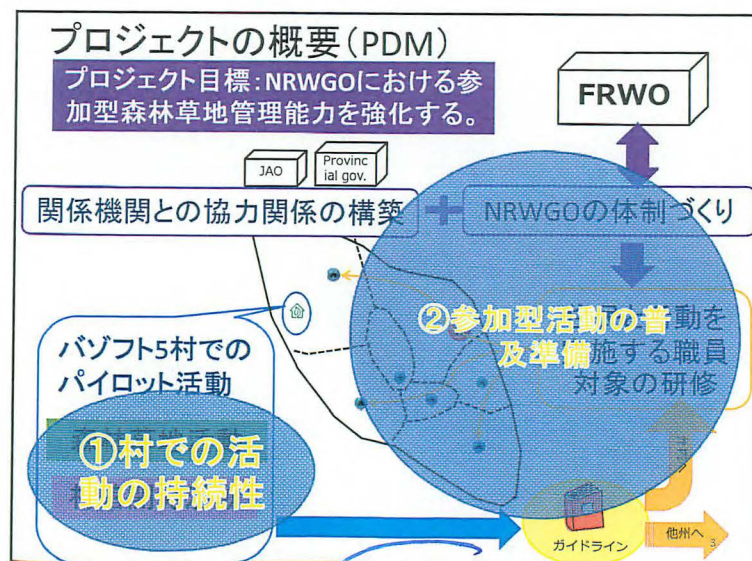
【プラスの評価】

- 住民との信頼関係が構築された。
- プロジェクトの活動の成果が現れ始めた。

【今後対応が必要な課題】

- NRWGOの組織体制、人的資源は不十分
- モデルプロットの持続性が低い
- 普及可能な森林・草地管理モデルの開発・推進

2



能力強化とは

課題対処能力が個人・組織・社会などの複数レベルの総体として向上していくプロセスを指す。

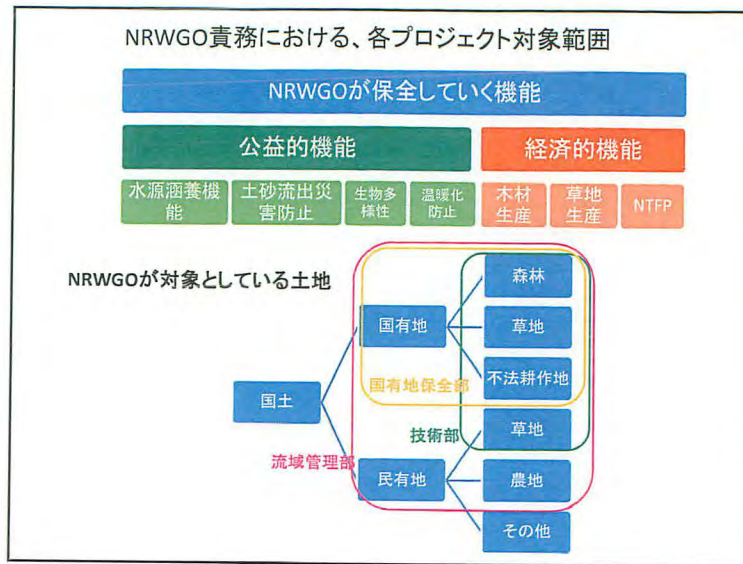


NRWGO内において、参加型活動に係るパイロット事業の実施を通して試行錯誤をし、自分たちで自分たちの事業に合った参加型を見つけて行けるようになること。

○パイロット事業例

JICA/パゾフトのパイロット事例
 参加型保全プロジェクト(国有地管理部)
 森林課、草地課の活動(技術部)
 MENARID(流域管理部)

4



2つの参加型アプローチ

参加型開発
(地域開発型)

- ◆ 自らの生活状況における問題を認識し、その問題解決のために、協議、意思決定、実施、評価を行っていくという住民のエンパワメントの成熟そのものが目的
- ◆ Putting the Last first(もつとも底辺の人を優先する)、Putting the First Last(アウトサイダーの価値観は最も後回しにされるべき)の実践
- ◆ 行政機関の政策目標の達成とは直接的には関連しない。(最終的にはその目標に向かう場合もあるが)

MENARIDが指向?

政策目標を達成するための参加型アプローチ(行政目的型)

- ◆ 政策目標(保護区の保全等)を住民に説明し、その達成のために、住民の同意の下、行政側が初期インプットの予算を投入して、住民が活動を実践する(実施可能な活動メニューがある)。
- ◆ 行政側と住民側の双方にとってのWin-Winの関係構築を目指したある種契約(双方がやるべき義務がある)。
- ◆ 行政機関の政策目標の達成に直接寄与

国有地保全部プロジェクトが指向?

延長フェーズ活動の基本方針(ワークプラン要点)

① NRWGOを始めとした行政側の持続的活動の実施のための体制づくり = 参加型活動の他地域への普及準備

⇒普及の観点を含めたNRWGOのCD戦略の改訂
⇒NRWGO職員的能力強化のための研修
⇒他地域での普及のためのガイドラインの改訂

② 実施対象村における活動の持続性の確保

⇒住民自身による活動継続のための体制強化
⇒住民自身の活動に移行するまでの役所による側面支援

③ 関係機関との連携

⇒活動レベルに応じた連携の提案
⇒MENARIDによる連携システムの運用支援

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PDM成果1の活動

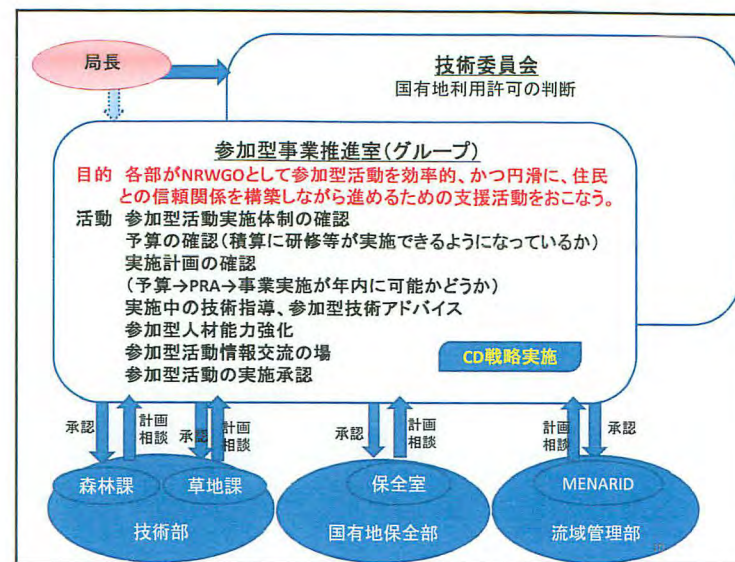
② 実施対象村における活動の持続性の確保

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普及の観点を含めたNRWGOのCD戦略の改訂案	
1. 参加型の目指す方向 (参加型活動を取り入れる意義)	国土保全と自然資源を持続的に利用するためには、住民の国土保全と持続的な自然資源管理に対する理解と活動への参加を得ることが必要。 事業部ごとに、各部の方針に適した参加型を模索する。
2. 方法論	
2.1 パイロット活動 (現場の実践)	実際のパイロット事業を実施しながら 、その中からそのNRWGOの参加型事業の持続的実施に必要な情報を蓄積していく。
2.2 人材育成	職員研修(パイロット事業のOJT、現場視察、知識研修)
2.3 予算の確保	モデル積算を開発し、計画的に予算要求する。 NRWGO所管事業以外の参加型活動についても、可能な範囲で他の組織に依存することなく自主的に実施できるように一部でも予算を積算する。 住民の信頼を無くさないためには予算執行の可能性を各段階を確認し住民に説明する。
2.4 連携 (内部連携、他機関連携)	各部署が実施している活動を蓄積・レビュー・情報共有し、相互に技術支援が出来る基盤を作っていく。 他機関との連携活動を先行実施しているMENARIDを強化し、今後NRWGOが他機関と連携して参加型活動を実施していくために必要な関係を築く。
3. NRWGO内の持続的参加型活動実施のための体制づくり	CD戦略実施＝参加型人材能力強化、参加型活動の実施承認、参加型活動情報交流の場、参加型技術アドバイスという機能を持った、 参加型事業推進室の立ち上げ。
⇒NRWGOによるCD戦略に基づいた実施計画の作成	



CD戦略改訂の進め方

- 2015年12月を目標に改訂する。
- 関係者の意見を十分に反映させる。
- 内容は公開する。

なお、CD戦略改訂と並行して、以下をプロジェクト活動として実施していく。

- 1- イラン側によるCD戦略実施計画の作成支援
- 2- バゾフトでの活動の持続性の確保
- 3- 参加型実施人材育成のための研修
- 4- 参加型活動情報共有
- 5- JICAプロジェクトチームによる参加型事業への技術アドバイス
- 6- MENARIDの他機関連携活動への支援

11

職員の能力強化研修

- CD戦略書案の考え方を踏まえ、CD戦略書作成作業に並行して職員研修実施計画を作成する。

目的: ・NRWGO職員が参加型森林草地管理を他地域に普及するための人材育成
・住民窓口となる地方事務所職員の能力の底上げ

活動: ・本プロジェクトの成果を活用したOJT(CPが講師となって若手の指導)
・地方支部の森林レンジャーを対象とした実務能力向上研修
・視察研修による知見の拡大

12

具体的な研修予定

- ファシリテーター育成研修
 ファシリテーター候補者の選定
 NRWGOが実施する参加型プロジェクトへの従事
 →OJTによる能力向上
 →ファシリテーター同士の情報共有
- 森林レンジャー研修
 問題点の確認
 問題解決のための研修(法律、GPS、報告書作成等)
- 視察
 これまで参加できなかった人を中心に参加型プロジェクトへの現場視察
- プロジェクト成果等広報資料の作成
 州内外の視察に対応するプログラム及び資料の作成

13

森林・草地管理の普及モデルの開発とガイドライン改訂

参加型森林・草地管理の普及ガイドラインの改訂

- ◆FWRO/NRWGOの政策を反映させる
- ◆NRWGOのガイドライン作成チームとの打合せ
- ◆パイロット5村での活動実践を通じた教訓を反映させる
- ◆ザグロス山系関係他州への視察と議論を反映させる
- ◆参加型での森林・草地管理を実践するための具体的な方法や手順を確立する

ガイドラインワークショップの開催

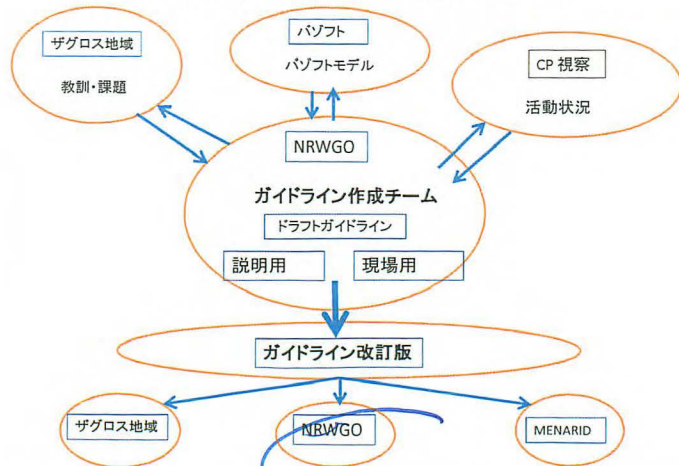
訪問したザグロス山系NRWGO関係者等への取りまとめた改訂ガイドラインの説明

ガイドライン改訂完了後

FWROにより他州への普及事業展開

14

ガイドラインの改訂と利用のイメージ



延長フェーズ活動の基本方針(ワークプラン要点)

① NRWGOを始めとした行政側の持続的活動の実施のための体制づくり = 参加型活動の他地域への普及準備

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② 実施対象村における活動の持続性の確保

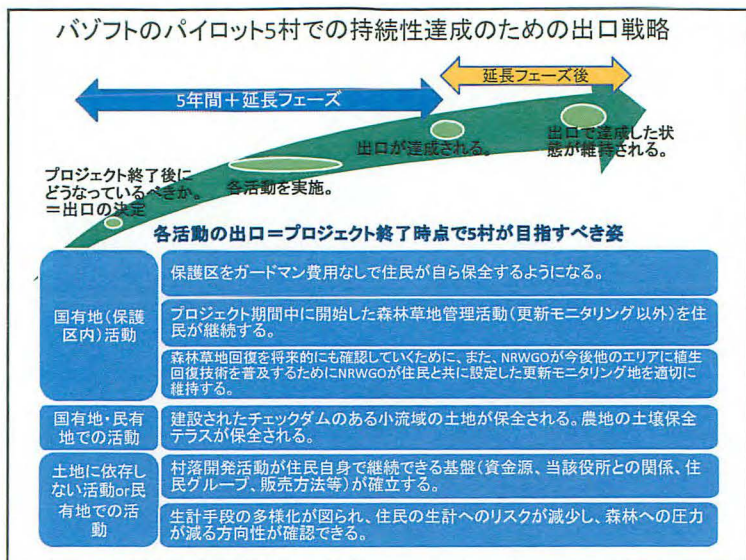
- ⇒住民自身による活動継続のための体制強化
- ⇒住民自身の活動に移行するまでの役割による側面支援

PDM成果2,3
の活動

③ 関係機関との連携

- ⇒活動レベルに応じた連携の提案
- ⇒MENARIDによる連携システムの運用支援

15



PDM成果2の活動

バゾフトのパイロット5村での持続的な参加型森林草地管理のための実施体制を構築・強化する

- 実施可能な住民・団体の育成
行政と連携できる住民組織とは(公共事業の受注者、助成金や補助金対象者になれるか)
- 国有地の貸付とその監督
- CFの能力強化
連絡調整会議、CF研修の実施
- 現地に適した資金調達方法の探索
- 関係機関の連絡先等の情報提供

PDM成果3の活動

バゾフトのパイロット5村において住民参加による森林草地管理活動を促進する

- VAPIについて、案を作成、協議、合意を得る。
- VAP活動を実施する。(下表: 想定される村落での活動)
- VAP参加者で活動のモニタリング・評価・フィードバックを行う。

森林草地活動	村落開発活動
保護区維持 (経済樹種・山菜・薬草の導入、条件付きでのガードマン支払いを含む)	マーケティング
更新モニタリング	リボルビングファンド型マイクロクレジットの立て直し
小規模チェックダム、テラスのモニタリング	積み立て型マイクロクレジットのモニタリング
固定試験区の設置	果樹管理技術補足(増殖技術等)
固定試験区での草地更新モニタリング	販売加工支援

延長フェーズ活動の基本方針(ワークプラン要点)

- NRWGOを始めとした行政側の持続的活動の実施のための体制づくり = 参加型活動の他地域への普及準備
⇒普及の観点を含めたNRWGOのCD戦略の改訂
⇒NRWGO職員の能力強化のための研修
⇒他地域での普及のためのガイドラインの改訂
- 実施対象村における活動の持続性の確保
⇒住民自身による活動継続のための体制強化
⇒住民自身の活動に移行するまでの役所による側面支援
- 関係機関との連携
⇒活動レベルに応じた連携の提案
⇒MENARIDによる連携システムの運用

PDM成果4の活動

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他機関との連携の考え方



- 持続性を確保するために実施する
- 連携すれば持続性が出るものではない
- 連携しなくても持続性が確保できれば良い
- NRWGが各ステップを支援できる活動(薬草、野生果樹)については、他機関を頼る必要はない?

活動レベルに応じた連携の検討

連携 詳細活動内容

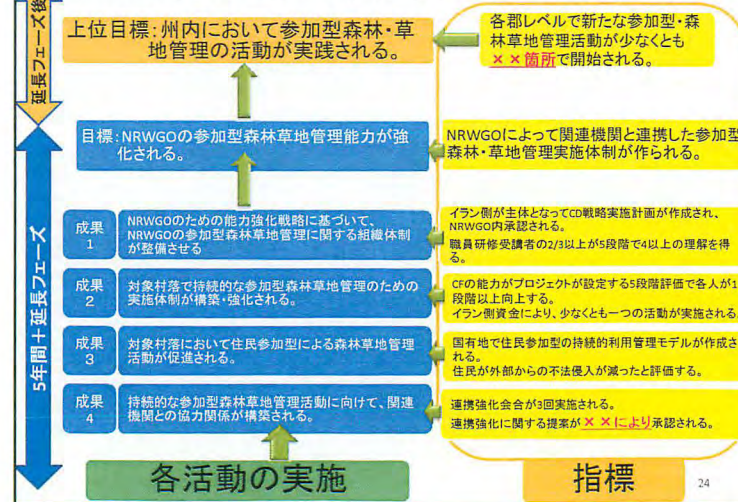
- JAOへの聞き取り
- 予算関係機関(MPO)への聞き取り
- MENARIDの実施方法の確認
- 他機関にNRWGO事業を理解してもらうワークショップ等の開催
- MENARIDにおける他機関との連携活動の支援
- 各事業毎の連携案の提案

日本への研修

	第1回目	第2回目
目的	プロジェクトの実施能力を高めるため	関係機関との協力関係を強化する
時期	2016年春 3週間	2016年夏 10日間
内容	日本の森林林業基礎持続性に関する座学 東京近郊への視察 地方での講義・視察 プロジェクトとの協議事例研究ワークショップ	州政府が地域で実施する参加型森林草地管理事業に対する資金的、組織的、技術的な支援のために、日本の仕組みについて事例に基づいた講義と視察

人選についてはCPに限らず、積極的に活動をしている職員、日本側がいなくても自主的に動いて活動を進めている職員、プロジェクト終了後も継続して参加型事業を主体的に進めていく職員を選定する。

プロジェクトPDMとモニタリングシートによる進捗確認



プロジェクト専門家リスト 2015年10月現在

Position	Iran	Japan	
Project Director	Mr. Parviz Garshasebi, Deputy of watershed management, range, and desert (FRWO)	Mr.	
Deputy Project Director	Mr. Mohammad Aghighi, Director general of coordination and planning office (FRWO)	Mr. Seiichi Mishima	
Project Manager	Mr. Ali Mohammadi Moghadam, Director general	Mr. Kazuhisa Kato	
Deputy Project Manager	Mr. Gholamhossein Nasiri, Technical deputy		
Project Coordinator	Mr. Hossein Ali Mohammadi, Forest expert (FRWO)	Ms. Saori Takei	
Institutional Strengthening and Coherence	Mr. Hossein Ali Mohammadi, Forest expert (FRWO) Mr. Ali Mohammadi Moghadam, Director general Mr. Hosein Bahrami, Watershed deputy	Mr. Kazuhisa Kato	
Participatory Forest and Rangeland Management	National Level	Mr. Jalal Bagheri, Expert in Charge of Out of North Forests Center Mr. Alimohammad Mohammadi, in charge of international Projects	Mr. Seiichi Mishima
	Forest and Rangeland	Mr. Fakhroddin Karimzade, Head of director general office Mr. Shahrām Jazayeri, Head of forest office Mr. Hamid Mahimpour, Secretary of technical committee	Mr. Atsushi Hisamichi
	Highland Rangeland	Mr. Mohammadreza Mohammadi, Head of rangeland office	
	Participatory Community Development	Mr. Farzad Rezazadeh, Expert of watershed management Mr. Alireza Mardanian, Expert of watershed management Ms. Arezoo Banihashmi, Head of protection office	Mr. Gholamhossein Shokohifard Ms. Saori Takei
Capacity Development / Training	Mr. Rahman Tavakoli, Head of Land assesment office Mr. Hooman Khakpoor, Head of extension office Ms. Maryam Rahnavard, Expert of Extension Office	Mr. Shoichi Yamashita	

論点

1. CD戦略案の参加型事業推進室について
→必要？構成は？設置権限は？
2. CD戦略実施計画の作成について
→作成担当者？
3. バズフトのパイロット5村の持続可能性
→出口戦略に対する意見
4. 他機関との連携について
→考え方に対する意見
→NRWGO所管の植物の生産販売技術について
→MENARIDとの関係について

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