

PROJECT PROFILE #08

Project Name: Plan of Extension Use of Improved Cooking Stoves and of Sauna Bath "Temascal"
Community: Pachum

Item	Contents		Remarks								
1. Objectives	<ul style="list-style-type: none">- Reduction of the daily consumption of firewood in order to conserve the forest in the mountain area.- Mitigation of heavy duty of firewood transportation with the reduction of the firewood consumption.- Improvement of the villagers' health condition with introducing a comfortable and economical sauna bath.										
2. Number of Beneficiaries	Improved stove: 130 families Improved Temascal: 40 families										
3. Implementation Organization	Pachum stove committee, MAGA and JICA Study Team										
4. Project Contents											
1) Project Outline	Presently, in the community, people cook with open fire and use traditional sauna bath, which are high-fuel-consuming and uncomfortable due to smoke filled inside. To improve this situation, 130 units of improved stove and 40 units of improved sauna bath will be installed and education on facility use and on forest conservation will be made.										
2) Facility / Activity	<table><thead><tr><th>Facilities/Activities</th><th>Implementator</th></tr></thead><tbody><tr><td>1) Improved stove: 130 units</td><td>MAGA</td></tr><tr><td>2) Improved Temascal: 40 units</td><td>MAGA</td></tr><tr><td>3) Demonstration and capacitation and</td><td>MAGA</td></tr></tbody></table>	Facilities/Activities	Implementator	1) Improved stove: 130 units	MAGA	2) Improved Temascal: 40 units	MAGA	3) Demonstration and capacitation and	MAGA		
Facilities/Activities	Implementator										
1) Improved stove: 130 units	MAGA										
2) Improved Temascal: 40 units	MAGA										
3) Demonstration and capacitation and	MAGA										
3) Organization for O&M	Community people by themselves										
4) Construction Period	Approximately 4 months										
5. Project Cost	<table><tbody><tr><td>1) Installation of improved stove.....</td><td>Q 97,582.64</td></tr><tr><td>2) Installation of improved sauna.....</td><td>Q 28,870.00</td></tr><tr><td>3) Demonstration</td><td>Q 2,800.00</td></tr><tr><td>Total Cost</td><td>Q 129,252.64</td></tr></tbody></table>		1) Installation of improved stove.....	Q 97,582.64	2) Installation of improved sauna.....	Q 28,870.00	3) Demonstration	Q 2,800.00	Total Cost	Q 129,252.64	Cost born by beneficiaries: Q 19,200
1) Installation of improved stove.....	Q 97,582.64										
2) Installation of improved sauna.....	Q 28,870.00										
3) Demonstration	Q 2,800.00										
Total Cost	Q 129,252.64										

6. Monitoring & Evaluation

Item	Frequency	Data collector	Aggregation	Decision Maker
1) People's impression on facility use	Before installation & 3 months after the installation	MAGA	MAGA	JICA Study Team
2) Firewood consumption before and after the project	Before installation & 3 months after the installation	MAGA	MAGA	JICA Study Team

7. Plan of Operation

Item	2001					2002											
	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12
1) Designing & demonstration																	
2) Construction works																	
3) Monitoring & Evaluation																	

□ : Schedule, ■ : Progress

PDM #08: Plan of Extension Use of Improved Cooking Stoves and of Sauna Bath "Temascal"

Community: Pachum Target Group: Residents of Pachum
 Period: Sep. 2001 ~ Dec. 2002 Implt. Organization: MAGA

November, 2002

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1. Poverty condition in central highland region will be mitigated.	1. Poverty indicator of rural area will be improved up to the provincial average by 2015.	1. FIS Poverty Indicator and monitoring on Farmers.	1. There will be no drastic change in development policy of Guatemalan Government.
Project Purpose 1. Forest will be conserved because firewood consumption will be reduced. 2. Work load will be reduced because firewood collection will be reduced. 3. Respiratory disease will be reduced because improved stove / sauna do not give smoke inside the room. 4. Health condition will be improved because of bathing will be increase.	1. Reduction of firewood consumption (over 20% reduction of present use of firewood consumption) and reduction of time consumption for firewood collection. 2. Reduction of respiratory disease	1. Monitoring on users 2. Record of health post	1. Similar type of projects will be implemented in other communities by utilizing monitoring results of the project.
Outputs 1. Improved stove will be installed and people use them properly. 2. Improved sauna will be installed and people use them properly.	1. Number of installed stove and number of user family 2. Number of installed sauna and number of user family	1. Monitoring on user families	1. There will be no drastic reduction in available amount of firewood because of forest fire, etc.
Activities 1. Designing of improved sauna / stove through people's participation 2. Demonstration of improved sauna / stove 3. Installation of improved stove (150 units) 4. Installation of improved sauna (40 units) 5. Instruction on use of improved facility 6. Education on forest conservation	Inputs JICA side 1) Installation of improved stove Q 97,582.64 2) Installation of improved sauna..... Q 28,870.00 3) Demonstration Q 2,800.00 Total Cost Q 129,252.64 Guatemalan side Cost born by beneficiaries..... Q 19,200 (Labor, materials)	1. There is no occurrence of natural disaster that damages the facilities such as earthquake.	Pre-conditions 1. There is no strong objection for installation of improved stove and sauna

PCM Evaluation #08: Plan of Extension Use of Improved Cooking Stoves and of Sauna Bath "Temascal"

Evaluation Summary	Efficiency	Effectiveness	Impact	Relevance	Sustainability
Overall Goal 1. Poverty condition in central highland region will be mitigated.			(+) Alleviation of burden of the trip provided people with another opportunity of jobs, time of household, and care of children. (+) People increase frequency of taking the sauna because of reduction of firewood.	(+) Forest conservation is one of important items of rural development in Guatemala. (+) Trip for firewood to the mountain is one of heavy work in the rural life.	(+) People recognized and understood the benefits of those facilities very well.
Project Purpose 1. Forest will be conserved because firewood consumption will be reduced. 2. Work load will be reduced because firewood collection will be reduced. 3. Respiratory disease will be reduced because improved stove / sauna do not give smoke inside the room. 4. Health condition will be improved because of bathing will be increase.		(+) Consumption of firewood was reduced largely. (+) Frequency of trip for firewood was reduced and burden of people was alleviated. (+) Many user appreciated the improved point of "no smoke".			
Outputs 1. Improved stove will be installed and people use them properly. 2. Improved sauna will be installed and people use them properly.	(+) Improved stoves were installed and used properly. (+) Improved stoves were installed and used properly. (-) The old design sauna was refused to use by beneficiaries, thus the design review and re-installation were made.				
Inputs 1) Improved stove(Q 97,583) 2) Improved sauna(Q 28,870) 3) Demonstration(Q 2,800)					

OVERALL EVALUATION #08
Plan of Extension Use of Improved Cooking Stoves and of Sauna Bath "Temascal"

Criteria	Result	Basis
Efficiency	Middle	- The improved saunas were reinstalled after design change. It needed more manpower, time and fund.
Effectiveness	Achieved	- Reduction of firewood was so big and contribute to improve quality of life in the rural area.
Impact	Positive impact	- People had more opportunities because of less trip to mountain. - People increased frequency of taking sauna, which contributed to improvement of health condition.
Relevance	High	- Forest conservation is one of important items in terms of rural development of Guatemala.
Sustainability	High	- Beneficiaries understood and recognized the benefits of the improved facilities very well

Conclusion	The reduction of firewood by the improved facilities was remarkable. It contributed not only to improve the quality of life in the community but also conserve forest and environment.
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Recommendation [Responsible agency]	The following items should be monitored with high priority. [MAGA] - After 1 year; condition of usage of the improved facilities. - After 5 year; condition of usage of operation status of the improved facilities.
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PROJECT PROFILE #09

Project Name: Potato Storage Plan
Community: Palestina

Item	Contents	Remarks																																																																																									
1. Objectives	To search an effective means of short term storage and to ascertain the acceptability of the quality of stored potato by conducting storage test at farmers' level. To stabilize farm-gate price of potato through the year and to increase and stabilize farmers' income by operating cold storage and farm level storing.																																																																																										
2. Number of Beneficiaries	210 farmers																																																																																										
3. Implementation Organization	Key farmers / NGO / Study Team																																																																																										
4. Project Contents																																																																																											
1) Project Outline	1) Storage at farmers level shall be conducted in cellar with cool condition of the project site for 1~2 months. 2) Collection of test data and monitoring shall be done periodically.																																																																																										
2) Facility / Activity	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Facilities/Activities</th><th style="width: 40%;">Implementator</th></tr> </thead> <tbody> <tr> <td>1) Construction and management of storage in cellar</td><td>Key farmers / NGO</td></tr> </tbody> </table>	Facilities/Activities	Implementator	1) Construction and management of storage in cellar	Key farmers / NGO																																																																																						
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4) Construction Period	3 (three) months																																																																																										
5. Project Cost	Total Cost..... Q 15,950																																																																																										
6. Monitoring & Evaluation																																																																																											
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□ : Schedule, ■ : Progress

PDM #09: Potato Storage Plan

Community: Palestina Target Group: Potato Producers
 Period: Sep. 2001 ~ Dec. 2002 Implt. Organization: MAGA

November, 2002

November, 2002

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1. Poverty condition in central highland region will be mitigated.	1. Poverty indicator of rural area will be improved up to the provincial average by 2015.	1. FIS Poverty Indicator and monitoring on Farmers.	1. There will be no drastic change in development policy of Guatemalan Government.
Project Purpose 1. Farm income level will be improved. 2. Supply and price of potato will be stabilized in Palestina area.	1. Income from potato production will be improved. 2. Marketed volume and price of potato in Palestina area.	1. Monitoring on association members 2. Interview survey with potato traders in Palestina area	1. Similar type of projects will be implemented in other communities by utilizing monitoring results of the project.
Outputs 1. Growers' Association is in act. 2. Potatoes are stored for 3 months at farmers level and 4~5 months at low temperature storage. 3. Potatoes are sold at higher price.	1. Number of association members and status of activities. 2. Stored volume, period, amount sold, and selling price (80% of planned volume). 3. Stored volume at farmers' level	1. Activity record of the association 2. Operation record of storage facility 3. Monitoring on farmers	1. There is no extreme reduction in the demand for potatoes. 2. There is no heavy drop of potato price.
Activities 1. Establishment of Potato Growers' Association 2. Provision of facilities of potato storage: - Farmer level - Association level 3. Execution of storage test - temperature, humidity - potato quality in storage 4. Operation of low temperature warehouse and maintenance. 5. Technical assistance - technical guidance to farmers by ICTA - technical training on operation & maintenance of the cold storage by Consultants 6. Monitoring and evaluation of the project.	Inputs <u>JICA side</u> Total Cost Q 15,950 <u>Guatemalan side</u> 1. Provision of lands for simple storage 2 sites (in Los Cabrera and Los Dias, about 12m ² in total) 2. Labor force of watching 12 man-days		1. No natural disasters (such as earthquake) that damage the facility occur. 2. Growers bring part of their produces to the facility.
			Pre-conditions 1. Related parties such as Municipality of Palestina and ICTA should be cooperative to the execution of the project.

PCM Evaluation #09: Potato Storage Plan

Evaluation Summary	Efficiency	Effectiveness	Impact	Relevance	Sustainability
Overall Goal 1. Poverty condition in the central highland region will be mitigated.		(+) It is expected that farm income level will increase for small-scale farmers.	(+) It is expected that income increase will contribute to the poverty reduction if technology of small storage at farmer's level is properly managed. (-) Actual impact shall be confirmed after several years since it takes more time for the effect to emerge more clearly.	(+) Income increase accrued from project implementation is expected to be quite important for the poverty reduction of indigenous people	(+) Since the potato storage project shows technical soundness and economical viability, it is expected that this project be sustainable. (-) Expansion of potato storage project requires continuing to demonstrate small storage technology.
Project Purpose 1. Farm income level will be improved. 2. Supply and price of potato will be stabilized in Palestina area.					
Outputs 1. Potatoes are stored for about 3 months at farmer's level. 2. Potatoes are sold at higher price.	(+) Quality of potatoes (Dias variety) that stored for about 3 months was acceptable for the demand of potato local market.				
Inputs 1. total cost: Q15,950	(+) Potatoes (Dias variety) were sold at higher price. (-) Potatoes (Loman variety) were not sold at higher price.				

OVERALL EVALUATION #09
Potato Storage Plan

Criteria	Result	Basis
Efficiency	High	<ul style="list-style-type: none"> - The results of the project indicated that quality of potatoes (Dias variety) that were stored for about 3 months was acceptable for demand of local potato market. - The results of the project indicated that potatoes (Dias variety) were sold at higher price, but Loman variety not.
Effectiveness	Partly achieved	<ul style="list-style-type: none"> - The result of the project indicated that the small storage technology at farmer's level for potatoes (Dias variety) was economically feasible.
Impact	Positive impact was observed.	<ul style="list-style-type: none"> - It is considered that the project could produce significant impact on increasing income for small-scale potato farmers if small storage at farmer's level is properly managed. - Farmers have not used small storage technology at farmer's level because they did not know it. It is important to make effort to continue demonstrating this small and profitable technology to small potato production farmers. - Actual impact shall be confirmed after several years since it takes more time for the effect to emerge more clearly.
Relevance	High	<ul style="list-style-type: none"> - Income increase accrued from project implementation is expected to be quite important for the poverty reduction of indigenous people.
Sustainability	Relative high	<ul style="list-style-type: none"> - Since the potato storage project shows technical soundness and economical viability, it is expected that this project be sustainable. Expansion of potato storage project requires continuing to demonstrate small storage technology.

Conclusion	<p>The results of the potato storage project showed that technology of simple storage at farmer's level was technical sound and economically feasible. It is necessary that small storage at farmer's level is properly managed in terms of control of pests and diseases.</p> <p>It is greatly expected that application of technology of simple storage at farmer's level to small scale-potato farmers will bring about increase of farm income and contribute to the reduction of poverty of the potato farmers in the potato production areas.</p> <p>In view of sustainability, it is essential to make effort to continue demonstrating this small and profitable technology to small potato production farmers.</p>
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Recommendation [Responsible agency]	<p>It is recommended that the demonstration on technology of simple storage at farmer's level should be continued by MAGA Quetzaltenango office in corporation with ICTA. Demonstration of storage should be carried out for about 70 to 90 days from about the middle of November to February for the potatoes with Dias variety that will be obtained at the second harvest. MAGA and farmers will share the necessary costs for demonstration at a rate of 50 to 50. [MAGA]</p> <p>It is also recommended that the following monitoring should be performed by MAGA Quetzaltenango office in corporation with farmers and ICTA in Quetzaltenango. [MAGA]</p> <ul style="list-style-type: none"> a) Operation period: once a year, for three years b) Demonstration place: 2 places: at Loa Cabrera and Los Diaz c) Monitoring items: (1) potato price and storage status, (2) cost and profit of storage operation, (3) the number of farmers who try to carry out storing potatoes by using this simple storage technology.
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PROJECT PROFILE #10

Project Name: Project of Model Farm on Potato Production
Community: Palestina

Item	Contents		Remarks
1. Objectives	To involve farmers in extension activities and to improve potato productivity by establishing model farms with applying ICTA standard cultivation method and other various factors of increasing production (compost feeding, IPM technology, use of clean seeds)		
2. Number of Beneficiaries	210 farmers		
3. Implementation Organization	Key farmers / Fundit / Study Team		
4. Project Contents			
1) Project Outline	(1) The following technologies regarding potato production increase are displayed at Model Farm: 1) Cultivation of ICTA standard. 2) Application of various quantities of compost to improve nutritious condition for potato plants. 3) Application of IPM to reduce number of chemical spray and prevent environmental pollution caused by the excessive use of chemicals. 4) Use of clean seeds. (2) The project provides various training to farmers by opening Training courses and field days.		
2) Facility / Activity	<i>Facilities/Activities</i>	<i>Implementator</i>	
	1) Model farm 10 cuerda (2 cuerda/village x 5 villages)	Key farmers / NGO	
	2) Training on potato cultivation	NGO	
3) Organization for O&M	Key farmer who provide land and labor for carry out the project.		
4) Construction Period	One week		Postponed until 2 nd crop of 2002
5. Project Cost	1) Input materials (fertilizers, seeds, agro-chemicals) : Q 5,900 2) Training and others: Q 8,180 Total project cost: Q 14,080		Cost born by beneficiaries: Q 3,875

6. Monitoring & Evaluation

Item	Frequency	Data collector	Aggregation	Decision Maker
1) Potato growing condition	45 day after seeding	NGO	NGO	Study Team
2) Harvested quantity of potato	Harvesting time	NGO	NGO	Study Team
3) Number of participants in training and field day	After meetings	NGO	NGO	Study Team

7. Plan of Operation

Item	2001					2002											
	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12
1) Preparation of input materials								△									
2) Opening Model Farm																	
3) Training △ & Field day ◇									△	△	△	△	△	△	△	△	△
4) Monitoring										△		△					

□ △ ◇ : Schedule, ■ ▲ : Progress

PDM #10: Project of Model Farm on Potato Production

Community: Palestina Target Group: Potato Producing Farmers
 Period: Sep. 2001 ~ Dec. 2002 Implt. Organization: Potato Growers' Association

November, 2002

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1. Poverty condition in central highland region will be mitigated.	1. Poverty indicator of rural area will be improved up to the provincial average by 2015.	1. FIS Poverty Indicator and monitoring on Farmers.	1. There will be no drastic change in development policy of Guatemalan Government.
Project Purpose 1. The productivity will increase from present 15 qq/crd to 25~30 qq/crd by cultivation technology transfer and extension. 2. Income level of potato producers will be improved.	1. The productivity in the communities will increase. 2. Income of the participants will increase.	1. Monitoring on farmers in the communities (sample survey). 2. Monitoring on farmers in the communities (sample survey)	1. Similar type of projects will be implemented in other communities by utilizing monitoring results of the project.
Outputs 1. Productivity is improved by the replacement of conventional seed potato with clean seed potato. 2. Effect of organic fertilizer is proved and excessive reliance on chemical fertilizer is reduced. 3. Disease resistant variety is cultivated and use of medicines and chemicals is reduced 4. Farmers take interest in the demonstration.	1. Yield of potato will be increased (over 130% of the present yield). 2. Yield of potato in each plot, namely, 1) No compost, 2) 1 kg/m ² , and 3) 2 kg/m ² . 3. Chemical application will be reduced from present 7~8 times to maximum 4 times. 4. Participant rate is over 70%.	1. Monitoring of crop yield in model farm 2. Monitoring of crop yield in model farm 3. Survey by interviewing farmers 4. Record of visitors	1. Market price of potato will not deteriorate from present level. 2. Demand for potato will not deteriorate from present level. 2. Supply of clean seed from ICTA will not cease. 3. Farmers can obtain seed potatoes of disease resistant variety to prevent damages by epidemics.
Activities 1. Establish model farm 1) ICTA Standard Cultivation Section (2.5 cuerda) 2) Clean seed section (2.5 cuerda) 3) Compost section (2.5 cuerda) 4) IPM corroborative section (2.5 cuerda) 2. Cultivation and display in model farm, conduct corroborative tests. 3. Training activities on cultivation technology. 4. Monitoring and evaluation of the project.	Inputs JICA Side 1. Farm input cost (materials) Q 5,900 2. Training cost..... Q 5,300 3. Others Q 2,880 Total Cost..... Q 14,080 Guatemalan side 1. Provision of lands for the model farm 10 cuerda 2. Provision of labor forces for operation of farms 160 man-days	1. There is no abnormal spread of plant disease (especially epidemics). 2. There is no abnormal weather, specially drought and no frost damage	Pre-conditions 1. Governmental organization such as ICTA will cooperate in technical assistance.

PCM Evaluation #10: Project of Model Farm on Potato Production

Evaluation Summary	Efficiency	Effectiveness	Impact	Relevance	Sustainability
Overall Goal 1. Poverty condition in the central highland region will be mitigated.			(-) The experimental results of low yield of potato in the model farms could not contribute to the poverty reduction in Palestina area as well as its surrounding areas.	(+) Poverty reduction in potato farmers would be obtained if clean potato seeds are certainly available and can be planted at adequate time.	The experiment of model farm on potato production should be carried out again at the right time of seeding.
Project Purpose 1. The production will increase from present 15 qq/cuerda to 25 to 30qq/cuerda by cultivation. 2. Income level of potato producers will be improved.					
Outputs 1. Productivity is improved by the replacement of conventional seed potato with clean seed potato. 2. Effect of organic fertilizer is proved and excessive reliance on chemical fertilizer is reduced. 3. Disease resistant variety is cultivated and use of medicines and chemicals is reduced. 4. Farmers take interest in the demonstration.	(-) The productivity of potato in model farms was not improved by use of clean seed potato. (-) Effect of organic fertilizer is not proved. (-) Disease resistant variety of potatoes was not available in ICTA and related organization (-) Participation rate to training is less than 70% of potato farmers.	(-) The increase of unit yield of potatoes was not found because of damage by 1) diseases and 2) shortage of soil moisture in the late of growing development period due to occurrence of short rain. (-) It was not certified that income level of potato farmers could improve due to low yield of potatoes in the model farms.			
Inputs 1. Total cost (Q14,080)	(-) Seeding of potato was so late owing to difficulty of obtaining clean seed potato.				

OVERALL EVALUATION #10
Project of Model Farm on Potato Production

Criteria	Result	Basis
Efficiency	Very low	<ul style="list-style-type: none"> - The yield of potatoes in the model farms was not obtained over 130% of the present farmer's yield. - Time of chemical application was not reduced. - Resistant variety against disease was not available. - Seeding of potato was so late owing to difficulty of obtaining clean seed potato - Participation rate to training is less than 70% of potato farmers.
Effectiveness	not achieved	<ul style="list-style-type: none"> - The increase of unit yield of potatoes was not found - Income level of potato farmers could not improve. - Since participation rate to training is less than 70% of potato farmers, it is essential that expansion of this improved farming method to small-scale farmers should be performed.
Impact	Positive impact was not observed.	<ul style="list-style-type: none"> - The experimental results of low yield of potato in the model farms could not contribute to the poverty reduction in Palestina area as well as its surrounding areas.
Relevance	Low	<ul style="list-style-type: none"> - Poverty reduction in potato farmers would be obtained if clean potato seeds were certainly available and can be planted at adequate time. -
Sustainability	Low	<ul style="list-style-type: none"> - The experiment of model farm on potato production should be performed again at the right time of seeding with clean seeds. For the expansion of such improved farming methods to the large areas, it is essential that ICTA should supply certified potato seeds.

Conclusion	<p>The results of the project of model farm on potato production could not showed that technology of improved farming method with use of certified potato seeds was technically sound and economically feasible. Because seeding of certified seeds could not be done at an appropriate time due to difficulty of obtaining certified seeds and experimental areas of the model farms. Further, there were abnormally long consecutive rainy days which resulted in a big occurrence of pest and diseases.</p> <p>The experiment of model farm on potato production should be carried out again at the right time of seeding.</p>
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Recommendation <i>[Responsible agency]</i>	<p>It is recommended that demonstration on improved farming technology proposed in the verification study should be done by MAGA Quetzaltenango office in corporation with ICTA. Improved farming technology consists of four different crop management, ICTA standard, application of different levels of compost, IPM and use of virus free potato seeds. Demonstration farms will be constructed at 2 places consisting of Los Cabrera and Los Dias and operated for 3 years. Cultivation of potato will be done twice a year comprising Loman variety from April to June and Dias variety from July to September, respectively. Training to farmers should be made by ICTA. MAGA and farmers will share the necessary costs for demonstration at a rate of 50 to 50. <i>[MAGA in cooperation with ICTA]</i></p> <p>It is also recommended that the following monitoring should be performed by MAGA Quetzaltenango office in corporation with farmers and ICTA in Quetzaltenango. <i>[MAGA in cooperation with ICTA]</i></p> <ul style="list-style-type: none"> a) monitoring period: twice a year, for three years b) monitoring items: (1) plant status and unit yield of potato in each different management (2) production cost and profit and (3) the number of farmers who apply the improved farming technology in their farms.
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PROJECT PROFILE #11

Project Name: Mini-Irrigation Plan
Community: Palestina

Item	Contents	Remarks															
1. Objectives	To increase farmers' income by means of 1) increasing the crop intensity with a pumping-up irrigation system and vinyl houses, 2) crop diversification and 3) organization of users association in terms of O&M of facilities and marketing.																
2. Number of Beneficiaries	Beneficiaries in the initial stage : 75 farmers, (150 farmers in total)																
3. Implementation Organization	Irrigation Committee of Palestina de Los Altos																
4. Project Contents																	
1) Project Outline	In Palestina area, the farmers cultivate low profitable crops, such as potato and maize, under rainfed conditions. Because of small land areas, climatic and topographic limitations, the agriculture production in Palestina area cannot sustain their families at present. This project aims to stabilize and increase the farmers' incomes by means of introducing a small-scale irrigated cultivation with spring water which is not utilized effectively in the area.																
2) Facility / Activity	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Facilities/Activities</th><th style="width: 50%;">Implementator</th></tr> </thead> <tbody> <tr> <td>1) Pump station (1 pump, 1 house)</td><td>Contractor (1-3)</td></tr> <tr> <td>2) Pipeline ; Conduction pipeline : 1.6 km Distribution pipeline : 3.2 km</td><td></td></tr> <tr> <td>3) Elevated regulating tank : 180 m³</td><td></td></tr> <tr> <td>4) Technical assistance : farming practices and marketing</td><td>ICTA / INTECAP/marketing company</td></tr> <tr> <td>5) Organization of the irrigation committee</td><td>The study team</td></tr> </tbody> </table>	Facilities/Activities	Implementator	1) Pump station (1 pump, 1 house)	Contractor (1-3)	2) Pipeline ; Conduction pipeline : 1.6 km Distribution pipeline : 3.2 km		3) Elevated regulating tank : 180 m ³		4) Technical assistance : farming practices and marketing	ICTA / INTECAP/marketing company	5) Organization of the irrigation committee	The study team				
Facilities/Activities	Implementator																
1) Pump station (1 pump, 1 house)	Contractor (1-3)																
2) Pipeline ; Conduction pipeline : 1.6 km Distribution pipeline : 3.2 km																	
3) Elevated regulating tank : 180 m ³																	
4) Technical assistance : farming practices and marketing	ICTA / INTECAP/marketing company																
5) Organization of the irrigation committee	The study team																
3) Organization for O&M	Irrigation committee (in cooperation with the Municipality office)																
4) Construction Period	4.5 month																
5. Project Cost	1) Construction cost Q 1,180,000 2) Training cost Q 48,000 Total Cost Q 1,228,000	Cost born by beneficiaries: Q 143,000															
6. Monitoring & Evaluation																	
<i>Item</i>	<i>Frequency</i>	<i>Data collector</i>	<i>Aggregation</i>	<i>Decision Maker</i>													
1) No. of beneficiary's attendants to the construction work	Everyday during construction period	Irri. Committee	MAGA	Study Team													
2) Progress of construction works	Every half month	MAGA/PJT staff	Study Team	Study Team													
3) Total benefits	Before and after 1 st crop season	MAGA/PJT staff	Study Team	Study Team													
4) Collection rate of the water charge	Every month	Irri. Committee	MAGA	Study Team													
7. Plan of Operation																	
<i>Item</i>	<i>2001</i>					<i>2002</i>											
	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12
1) Construction works																	
2) Technical assistance																	
3) Cultivation																	
4) Monitoring			△	△	△	△	△	△	△	△	△	△	△	△	△	△	△

PDM #11: Mini-irrigation Plan

Community: Palestina	Target Group: 75 Vegetable Producers
Period: Sep. 2001 ~ Nov. 2002	Implt. Organization: MAGA & Water Users' Association

January, 2003

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1. Poverty condition in central highland will be mitigated.	1. Farm income level will increase up to the provincial average by 2015.	1. Monitoring of farm income through sample interview survey and statistics.	1. There will be no drastic change in development policy of the Guatemalan government.
Project Purpose 1. Income level of the beneficiaries will be improved.	1. Income level of the beneficiaries (income from vegetable production) will increase.	1. Monitoring of farm income through interview survey.	1. Similar type of projects will be implemented in other neighboring communities with utilizing the monitoring results of this project.
Outputs 1. Irrigation system is utilized. 2. Water users' association is in act. 3. Water charge is properly collected. 4. The facility is properly maintained by the water users. 5. Farmers master skill of vegetable production. 6. Increase of land use intensity from 2 harvests to 3 harvests per year. 7. Increase of crop yield and quality.	1. Number of water users association and number of facility users 2. Collection rate is more than 80%. 3. Condition of operation and maintenance of the facility (Utilization of water charge and actual working days of the facility) 4. Number of farmers that practice vegetable production.	1. Record of water users' association and water users. 2. Record of water charge collection (account book). 3. Monitoring of the facility 4. Monitoring of farmers 5. Monitoring on agricultural production.	1. Demand for vegetable will not be worsen. 2. There is no extreme reduction in the price of vegetable.
Activities 1. Construction of irrigation system. 2. Establishment of water users association and its strengthening 3. Collection of water charge by water users' association. 4. Operation and maintenance of system by water users themselves 5. Training on vegetable production 6. Acquisition of farm inputs for vegetable production 7. Arrangements for obtaining credit from Rural Bank or contract growers 8. Arrangements for marketing of vegetables	Inputs JICA side 1. Construction cost, training cost for operation and maintenance of irrigation system and: Q 1,180,000 2. Cost for technical assistance of agricultural farm practices and organizational assistance for water users' association (its establishment and strengthening): Q 48,000 Total Construction Cost Q 1,228,000 3. Cost for provision of initial farm inputs of vegetable production : Q 143,000	1. There is no abnormal weather such as drought, abnormal scale typhoon, etc. 2. There is no abnormal outbreak of pests and/or diseases of vegetables.	Pre-conditions 1. People have intention to participate in construction of irrigation system and are willing to pay necessary cost (water charge, etc.)

OVERALL EVALUATION #11
Mini-irrigation Plan

Conclusion	Because of the existence of a group of people who strongly opposed to the project, it was decided to cancel the Mini-Irrigation project with concerning about the possibility of security problem to the study team.
Recommendation	<p>Provided that the communal conflict is solved clearly and this project resumes in future, the executive agency should take care of the following points in implementation in order to solve villagers' suspicious mind about project.</p> <ol style="list-style-type: none">1) It should be understood certainly that establishment of good relation with village people is key of the project implementation especially in such area. The public meeting and discussion should need more frequency, care and time than in normal cases.2) It is recommended to implement the project step by step. The project should start with small number of beneficiary and small scale in order to demonstrate certainty of project execution to the people.

PROJECT PROFILE #12

Project Name: Plan for Migrant People to the Coastal Area
Community: Palestina

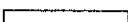



Item	Contents	Remarks												
1. Objectives	People in Palestina de Los Altos has a very small landholding size and their economy remains at subsistent level. About 80% of the people annually migrate to hacienda in the coastal area to rent lands for obtaining maize and income as agricultural labor. However, the living and health condition in the hacienda area is very severe. Most of the people suffer from water-born diseases, malaria, dengue and contamination by agricultural chemicals. This project aims to improve such bad conditions by educational training for migrant people and provision of materials necessary for preventing diseases and contamination.													
2. Number of Beneficiaries	About 200 households in 5 caserios													
3. Implementation Organization	Migrant people committee/JICA Study Team													
4. Project Contents														
1) Project Outline	1) A base-line survey will be carried out for selected farmers to grasp and identify problems of living conditions such as health, sanitation, agricultural chemical contamination, etc. 2) An educational training system will be established. And training programs will provide technical services on health control with migrant people. 3) Provision of materials (simple water filter system, materials to prevent agricultural chemical contamination, seeds of repellent plant and simple toilet) for preventing migrant people from diseases and contamination.													
2) Facility / Activity	<table><thead><tr><th>Facilities/Activities</th><th>Implementator</th></tr></thead><tbody><tr><td>1) Training for 10 staff of health center and 10 school teachers</td><td>1) NGO</td></tr><tr><td>2) Training for 20 health promoters</td><td>2) NGO/auxiliary nurses</td></tr><tr><td>3) Training for 200 migrant people</td><td>3) NGO, auxiliary nurses, school teachers</td></tr><tr><td>4) Provision of materials necessary for preventing diseases and contamination</td><td>4) NGO/JICA</td></tr><tr><td>5) Setting up committee</td><td>5) NGO</td></tr></tbody></table>	Facilities/Activities	Implementator	1) Training for 10 staff of health center and 10 school teachers	1) NGO	2) Training for 20 health promoters	2) NGO/auxiliary nurses	3) Training for 200 migrant people	3) NGO, auxiliary nurses, school teachers	4) Provision of materials necessary for preventing diseases and contamination	4) NGO/JICA	5) Setting up committee	5) NGO	
Facilities/Activities	Implementator													
1) Training for 10 staff of health center and 10 school teachers	1) NGO													
2) Training for 20 health promoters	2) NGO/auxiliary nurses													
3) Training for 200 migrant people	3) NGO, auxiliary nurses, school teachers													
4) Provision of materials necessary for preventing diseases and contamination	4) NGO/JICA													
5) Setting up committee	5) NGO													
3) Organization for O&M	Non													
4) Construction Period	1) Base line survey:4 weeks, 2)training for staff of health center and school teachers, 3) training for health promoters:1 month, 4) training for migrant people: 2 months and 5) monitoring: 2months													
5. Project Cost	1) Cost of materials to prevent diseases and contamination.....Q 180,420 2) Training (including base line survey/monitoring).....Q 108,771 3) Other.....Q 31,229 Total cost.....Q 320,420													

6. Monitoring & Evaluation

Item	Frequency	Data collector	Aggregation	Decision Maker
1) Use condition of water filter and toilet	2 times/15 months	NGO	NGO	JICA Study Team
2) Use condition of materials for agri. chem. contamination	2 times/15 months	NGO	NGO	JICA Study Team
3) Growing condition of repellent plants	2 times/15 months	NGO	NGO	JICA Study Team
4) Number of morbidity	2 times/15 months	NGO	NGO	JICA Study Team

7. Plan of Operation

Item	2001					2002											
	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12
1) Base-line survey																	
2) Educational training																	
3) Provision of materials																	
4) Monitoring																	

  : Schedule,
   : Progress

PDM #12: Plan for Migrant People to the Coastal Area

Community: Palestina Target Group: Migrantes in Palestina de Los Altos
 Period: Sep. 2001 ~ Dec. 2002 Implt. Organization: JICA

November, 2002

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1. Poverty condition in central highland region will be mitigated.	1. Poverty indicator of rural area will be improved up to the provincial average by 2015.	1. FIS Poverty Indicator and monitoring on Farmers.	1. There will be no drastic change in development policy of Guatemalan Government.
Project Purpose 1. Health condition of the migrants will be improved.	1. Reduction of top-ten illness of migrants by 15 per cent.	1. Result of sample survey on morbidity of migrants	1. Similar type of projects will be implemented in other neighboring communities.
Outputs 1. Migrants use the water filter and obtain safe drinking water. 2. Migrants use pesticides properly and are free from diseases. 3. Migrants cultivate repellents plants. 4. Migrants prepare and use simple toilets and improve sanitary conditions. 5. Health personnel train migrants on the 4 subjects (safe water, pesticides, Malaria/Dengue & toilets)	1. 80% of the migrants use water filter. 2. 80% of the migrants use pesticides-precaution set. 3. 80% of migrant perceive that there is repellent effect by plants. 4. 80% of the migrants prepare toilets 5. Number of mobility	1. Result of sample survey in the field	1. The living condition of migrants does not change dramatically in the destination.
Activities 1. Use of safe water - Provision of water filter - Training* on use of water filter and general knowledge of safe water 2. Precaution of pesticide use - Provision of precaution material (mask, grove, etc.) - Training* on pesticide precaution and general knowledge on pesticides 3. Malaria/Dengue prevention - Provision of seeds of anti-Malaria / Dengue plants. - Training* on practical knowledge for prevention of tropical disease. 4. Sanitation - Provision of simple toilets for migrants - Training* on use of simple toilet and general knowledge on sanitary * Training will be conducted for Health Center, School teacher, Health Promoter and Migrants. 5. Provision of teaching materials to school teachers, health center and health promoter	Inputs 1. Purchasing cost of necessary equipment Q 180,420 2. Training cost / materiales Q 108,771 3. Other Q 31,229 Total Cost Q 320,420	1. Trained personnel in the health center and health promoters remain in Palestina in the following year. 2. Trained school teachers remain in Palestina 3. The destination of migrants do not change dramatically	Pre-conditions 1. The migrants in Palestina and fincas do not object the project.

PCM Evaluation #12: Plan for Migrant People to the Coastal Area

Evaluation Summary	Efficiency	Effectiveness	Impact	Relevance	Sustainability
Overall Goal 1. Poverty condition in the central highland region will be mitigated.		(+) No morbidity by contamination of agricultural chemicals in the coastal area was observed. (-) Health and sanitary improvement except contamination of agricultural chemicals is not yet achieved.	(±) There was no reduction of morbidity except contamination of agricultural chemicals in the coastal area. (±) Use of equipment of portable toilet and in the Palestina model area brought about sanitary improvement in model area and convenience of living of people regarding water use.	(+) The demand that migrants escape from contamination of agricultural chemicals is still very high. (-) Use of equipment except one against contamination of agricultural chemicals did not always accord with actual requirement of the migrants.	(±) Most of all migrants used materials and equipment against escape from contamination of agricultural chemicals in the coastal area due to their convenience of transportation and full understanding of positive effects against contamination. (-) Other materials and equipment were not used in the coastal area by most of migrants and there will be low possibility of using these materials and equipment.
Project Purpose 1. Health condition of the migrants will be improved.					
Outputs 1. Migrants use the water filter and obtain safe drinking water. 2. Migrants use pesticides properly and are free from contamination of agricultural chemicals 3. Migrants cultivate repellent plants. 4. Migrants prepare and use simple toilets and improve sanitary conditions 5. Health personnel train migrants on the 4 subjects (safe water, pesticides, Malaria/dengue and toilets)	(-) Over 90% of the total migrants didn't use water filters in the coasta. (+) Most of the migrants managed agro-chemical by use of equipment & materials to avoid contamination. (-) Only 2% of the total migrants cultivated repellent seeds in the coastal area and all seeds could not grow. (-) Over 90% of the migrants did not use portable toilets in the coastal area.				
Inputs 1. Necessary equipment (Q180,420) 2. Training & materials (Q108,771) 3. Other (Q31,229) 4. Total cost (320,420)	(+) The training programs were performed for about 130 migrants.				

OVERALL EVALUATION #12
Plan for Migrant People to the Coastal Area

Criteria	Result	Basis
Efficiency	Low	<ul style="list-style-type: none"> - Most of migrants used material and equipment against contamination of agricultural chemicals. - No reduction of morbidity was observed, because over 90% of migrate people did not use water filters, portable toilets and seeds of repellent plants.
Effectiveness	Partly achieved	<ul style="list-style-type: none"> - No morbidity by contamination of agro-chemicals in the coastal area was observed because of use of mask, gloves, raincoats and boots - Health and sanitary improvement except contamination of agro-chemicals were not yet achieved because most migrants did not bring water filters, portable toilets and seeds of repellent plants to the coastal area.
Impact	Positive impact was observed.	<ul style="list-style-type: none"> - It is considered that health improvement regarding escape from contamination of agro-chemicals contributed to the improvement of living environment. - There was no reduction of morbidity except contamination of agricultural chemicals. - Sanitary improvement was found in Palestina de Los Altos. - Use of dismantled water filter that plays an important role in convenience of living of people is observed.
Relevance	Medium	<ul style="list-style-type: none"> - The demand that the migrant people (indigenous people) escape from contamination of agro-chemicals is still very high. Provision of training on treatment of agro-chemicals and distribution of equipment for preventing contamination was quite important for their health improvement. - Use of equipment of water filters and portable toilets and seeds of repellent plants in the coastal areas for health improvement did not always accord with actual requirement of the migrant people.
Sustainability	Partly high	<ul style="list-style-type: none"> - Most of all migrants used materials/equipment against escape from contamination of agricultural chemicals in the coastal area due to their convenience of transportation and understood positive effects against contamination. - On the other hand, over 90% of the migrant people did not bring equipment of water filters and portable toilet to the coastal area and did not use them.
Conclusion	<p>Most of migrants used materials and equipment against contamination of agro-chemicals in the coastal area. On the other hand, over 90% of migrants did not use water filters, portable toilets and seeds of repellent plants. As a result, no reduction of morbidity except contamination of agricultural chemicals was observed.</p> <p>Use of portable toilets and dismantled water filters were observed in Palestina and actual requirement of the migrants did not accord with health improvement in the coastal area as original purpose.</p> <p>The demand that the migrant people (indigenous people) escape from contamination of agricultural chemicals is still very high. However, the demand for use of safe water and better sanitary does not appear low. Only reduction of morbidity due to contamination of agricultural chemicals will be expected in the future.</p> <p>Based on the result of the above evaluation, the project is assessed to be low to medium in terms of efficiency, effectiveness, and relevance.</p>	
Recommendation <i>[Responsible agency]</i>	<p>It is recommended that more portable and adequate alternative ways for water filters and portable toilet should be studied and selection of varieties of repellent plants should be researched. <i>[MAGA]</i></p> <p>It is also recommended that the following monitoring should be performed to evaluate this project and identify problems. <i>[MAGA]</i></p> <ul style="list-style-type: none"> a) Monitoring period: once a year, for three years b) Monitoring items: (1) status of use of water filters, portable toilet and equipment against agricultural chemicals in the coastal area and in the model area, (2) the number of farmers who go down to the coastal area and to the U.S.A. and (3) the number of morbidity in the coastal area. 	

PROJECT PROFILE #13

Project Name: Municipality Community Health Activity Plan
Community: Palestina

Item	Contents		Remarks														
1. Objectives	To offer better access to cheaper and more variety of drugs at municipal and village level, by selling PROAM drugs at Municipal Pharmacy Unit located in villages; as well as offer sustainable health education program to the community.																
2. Number of Beneficiaries	Approximately 3,000 persons in 325 households in 5 villages.																
3. Implementation Organization	Health Committee of Los Cabrera and Los Diaz, Health Center and Municipality/JICA Study Team																
4. Project Contents																	
1) Project Outline	Introduce cheap drugs from PROAM and first aid attention to Municipal Pharmacy and two Minimal Pharmacy Unit (MPU) in village level. Health Promoters will be in charge of the MPUs previously trained by Health Center and professional pharmacist. Auxiliary Pharmacist in charge of Municipal Pharmacy must be trained to full fill requirements of PROAM. Selling price of drugs can be increase 133% and the profit can be keep as incentive for promoters and health committee for sustainable education program to the community. The operation must be supervised monthly by municipality for accountant issues ad technical assistance by health center.																
2) Facility / Activity	Facilities/Activities 1) Pharmacy building and equipment 2) Drug input for 6 months 3) Promoter Training 4) Auxiliary Pharmacist training	Implementator 1) Contractor 2) Municipal Pharmacy /JICA 3) Health Center, Professional Pharmacist 4) CEGIMED															
3) Organization for O&M	Health committee, Health Center and Municipality.																
4) Construction Period	4 month training Auxiliary Pharmacist, 3 weeks training promoters, 1 month construction MPU.																
5. Project Cost	1) Equipment MPU Q 38,055.00 2) Drug Input Q 22,932.00 3) Training Q 30,850.00 Total Cost Q 91,837.00																
6. Monitoring & Evaluation																	
Item	Frequency	Data collector	Aggregation	Decision Maker													
1) Drug sales and stock control	Monthly	H. committee	Municipality	Study Team													
2) Health education participants	Monthly	H. committee	Health center	Study Team													
3) Amount and use of money reserved by health committee	Monthly	H. committee	H. committee	Study Team													
4) Participation of health center in education session	Every 3 months	Municipality	Study Team	Study Team													
7. Plan of Operation																	
Item	2001				2002												
	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12
1) Training																	
2) Installation MPU																	
3) Registration to PROAM																	
4) sale of medicine																	
5) Health education																	
5) Monitoring						Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ

△ : Schedule, ▲ : Progress

PDM #13: Municipality Community Health Activity Plan

Community: Palestina Target Group: People in relevant communities
 Period: Sep. 2001 ~ Dec. 2002 Implt. Organization: Municipality, Health Center, Municipal Pharmacy, Health Committee, Health Promoter

November, 2002

November, 2002

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1. Poverty condition in central highland region will be mitigated.	1. Poverty indicator of rural area will be improved up to the provincial average by 2015.	1. FIS Poverty Indicator and monitoring on Farmers.	1. There will be no drastic change in development policy of Guatemalan Government.
Project Purpose 1. People will have sufficient knowledge on health and hygiene. 2. Improvement of rural health service quality.	1. Reduction of particular morbidity rate. 2. Increase of family planning utility and vaccination rate. 3. Distance, time and cost saved to buy drugs.	1. Medical statistics at Municipal level 2. Sample survey in the 5 communities 3. Cost and distance comparison of MPU and private pharmacies.	1. Similar type of projects will be implemented in other neighboring communities with utilizing the monitoring results of this project.
Outputs 1. Drugs are available at cheap price as well as first aid treatment at the village level 2. Drugs at Municipal Pharmacy become cheaper by introduction of PROAM 3. Regular health education program is conducted at village level 4. Incentives for health promoters are sustained through revolving drug fund.	1. Drugs are sold at MPU and Municipal Pharmacy more than Q800 / month/ MPU. 2. Participants in health education increase. 3. Stock is controlled accurately and accounting is kept appropriately. 4. Number of health promoters in active does not reduce.	1. Accounting record of MPU and Municipal Pharmacy 2. Monitoring of health education by health promoter 3. Monthly accounting and stock control record 4. Monitoring by health committee and municipality	1. There is no drastic change in pricing structure of drugs. 2. Demand for drugs is not drastically reduced. 3. People's interest and willingness to participate in health education is sustained.
Activities 1. Establishment of health committee 2. Selection of auxiliary pharmacist and promoter candidates 3. Training of 1 auxiliary pharmacist and 2 health promoters and health committee members 4. Introduction of cheaper PROAM drugs at Municipal pharmacy 5. Installation of Minimal Health Unit in charge of selling cheap PROAM drugs and first aid treatment in the village 6. Monthly health education by promoters and health center 7. Monthly supervision of MPU by committee as well as municipality	Inputs JICA side 1. Training cost of an auxiliary pharmacist - Course for 200 hours by CEGIMED..... Q 19,200 2. Training cost of ten health Promoters who will be in charge of MPU Q 5,700 - 10 days on pharmaceutical issues, - 5 days on health education & first aid 3. Initial cost for drug inputs and initial Q 22,883 4. Provincial equipment Q 6,209 5. Building cost of MPU Q 26,100 		

PCM Evaluation #13: Municipality Community Health Activity Plan

Evaluation Summary	Efficiency	Effectiveness	Impact	Relevance	Sustainability
Overall Goal 1. Poverty condition in the central highland region will be mitigated.			(+) Community people as well as out side people reduced the medical expense and transportation fee.	(+) The demand of cheaper drugs in the communities is still high and provision of cheaper drugs is very important for improvement for health service quality.	(-) Amount of sale of drugs and incentives to health promoters are small.
Project Purpose 1. People will have sufficient knowledge on health and hygiene. 2. Improvement of rural health service quality.		(+) Establishment of health committee and good management system of MPUs was observed. (+) Reduction of morbidity.	(+) Surrounding areas also enjoy the cheaper price of thread.	(+) It is expected that sufficient knowledge on health and hygiene is highly required in the community people.	(-) Burden of health promoter is heavy.
Outputs 1. Drugs are available at cheap price as weak as first aid treatment at the village level. 2. Drugs at municipal pharmacy become cheaper by introduction of PROAM. 3. Regular health education programs are conducted at village level. 4. Incentives for health promoters are sustained through revolving drug fund.	(+) Drugs were available at cheap price as well as at community level. (+) Drugs at municipal pharmacy became cheaper by introduction of PROAM. (+) Regular health education programs were conducted. (-) Incentives for health promoters were sustained through revolving drug fund, but were small				
Inputs 1. Equipment MPU (Q32,309) 2. Drug inputs (Q 22,883) 3. Training (Q24,900) 4. Total (Q80,092)					

OVERALL EVALUATION #13
Municipality Community Health Activity Plan

<i>Criteria</i>	<i>Result</i>	<i>Basis</i>
Efficiency	High	<ul style="list-style-type: none"> - Drugs were available at cheap price as well as first aid at community level. - Drugs at municipality pharmacy became cheaper by introduction of PROAM. - It was observed that regular health education programs were conducted at community level. - Incentives for health promoters were given through introduction of revolving drug fund system, but incentives are small.
Effectiveness	Achieved	<ul style="list-style-type: none"> - Establishment of health committee and good management system of MPUs was observed. - Reduction of morbidity.
Impact	Positive impact was observed.	<ul style="list-style-type: none"> - Community people as well as out side people reduced the expense by getting cheaper drugs and saved transportation free. - From a revenue of the MPU, health committees had their own fund and utilized fund for health service activities, support to the medical attention in MPUs, and so forth. In the future, it is expected that such health services activities arranged by the health committee will be increase as increase of the sale of MPUs.
Relevance	High	<ul style="list-style-type: none"> - The demand of cheaper drugs in the communities is still high and provision of cheaper drugs is very important for improvement of rural health service quality. - It is expected that sufficient knowledge on health and hygiene is highly required in the community people.
Sustainability	Relatively high	<ul style="list-style-type: none"> - Amount of sale of drugs and incentives to health promoters are small. - Burden of health promoters is heavy

Conclusion	<p>Improvement of quality of health services in the communities was achieved by good management of established revolving drug fund system of PROAM that played a role in supply of cheaper drugs and regular health education.</p> <p>Various impacts such as reduction of medical expenses of the local people and promotion of activities for health service and so forth occurred.</p> <p>Since amount of sale of drugs and incentives of health promoters, however, are small at present, burden of health promoters is very heavy. Then, it is necessary to increase amount of sale of drugs and incentives of health promoters in view of project sustainability.</p>
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Recommendation <i>[Responsible agency]</i>	<p>It is recommended for sustainable operation of this project that advertisement for sale of drugs of MPUs should be reinforced for the local people outside of the model area and migrant people to the coastal area. <i>[Municipality pharmacy]</i></p> <p>It is also recommended that the health development committee should continue doing the following monitoring for proper operation of MPUs. <i>[Health development committee]</i></p> <ul style="list-style-type: none"> a) Monitoring period: monthly basis, for three years b) Monitoring items: (1) stock inventory of MPUs and (2) financial condition of MPUs.
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PROJECT PROFILE #14







Project Name: Water Quality Improvement Plan for the Existing Drinking Water
Community: Palestina

Item	Contents		Remarks
1. Objectives	To improve health condition of the community residents through improvement of drinking water quality by installation of sterilizer.		
2. Number of Beneficiaries	Users of present potable water supply system: 106		
3. Implementation Organization	Water Committee		
4. Project Contents			
1) Project Outline	Sterilizer will be installed to the water tank and hypo chlorinate will be injected into the potable water in order to eliminate bacteria. People education will be conducted so that people use improved water continuously and pay necessary expense for the operation of sterilizer.		
2) Facility / Activity	<i>Facilities/Activities</i>	<i>Implementator</i>	
	1) Hypo chlorinates Dosing 3 unit 2) People education	Contractor Water Committee (under the supervision of the study team)	
3) Organization for O&M	Water Committee		
4) Construction Period	1.5 months (Period necessary for installation of sterilizer and construction of houses)		
5. Project Cost	1. Hypo chlorinates / materials Q 24,647 2. House construction..... Q 120,326 Total Cost Q 144,973		After use of initial hypo chlorinate, Palestina de los Altos municipality will provide it to this project.

6. Monitoring & Evaluation

Item	Frequency	Data collector	Aggregation	Decision Maker
1) Users of improved water	Every 3 months	Water Committee	Water Committee	Study Team
2) Operation status of sterilizer	Monthly	Water Committee	Water Committee	Study Team
3) Number of diarrhea patient	Every 3 months	Water Committee	Water Committee	Study Team
4) Simple water quality test	Every year	Water Committee	Water Committee	Study Team

7. Plan of Operation

Item	2001					2002											
	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12
1) Purchase of equipment																	
2) Installation of sterilizer																	
3) People education																	
4) Monitoring			△	△	△	△	△	△	△	△	△	△	△	△	△	△	△

 △ : Schedule,  ▲ : Progress

PDM #14: Water Quality Improvement Plan for the Existing Drinking Water

Community: Palestina Target Group: People in relevant communities
 Period: Sep. 2001 ~ Dec. 2002 Implt. Organization: Municipality, Health Center, Municipal Pharmacy, Health Committee, Health Promoter

November, 2002

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1. Poverty condition in central highland region will be mitigated.	1. Poverty indicator of rural area will be improved up to the provincial average by 2015.	1. FIS Poverty Indicator and monitoring on Farmers.	1. There will be no drastic change in development policy of Guatemalan Government.
Project Purpose 1. Health condition of inhabitants in Palestina is improved.	1. Morbidity of water-borne diseases in Palestina is reduced.	1. Interview survey of potable water users. 2. Number of water-borne disease patients (such as diarrhea) in the health post.	1. Similar type of projects will be implemented in other communities by utilizing monitoring results of the project.
Outputs 1. Quality of potable water is improved. 2. Beneficiaries use improved potable water. 3. Sterilizer is properly maintained.	1. No colon bacillus is detected in potable water. 2. There is no reduction in the number of water user. 3. Sterilizer is constantly in operation.	1. Simple water quality test. 2. Monitoring on potable water user. 3. Number of operating days of sterilizer.	1. There is no chemical contamination occurs in potable water.
Activities 1. Education on use of improved water is made for beneficiaries through water committee. 2. Sterilizer is installed to the water supply system. 3. O&M and fee collection of the sterilizer are made by water committee.	Inputs <u>JICA side</u> 1. Hypo chlorinates / materials Q 24,647 2. House construction..... Q 120,326 Total Cost Q 144,973 <u>Guatemalan side</u> 1. Land for house 30 m ² x 3 places		1. Installation of sterilizer is made with the consensus of community. 2. No disaster that damages water system occurs such as earthquake.
			Pre-conditions 1. There is no strong objection to the installation of sterilizer.

PCM Evaluation #14: Water Quality Improvement Plan for the Existing Drinking Water

Evaluation Summary	Efficiency	Effectiveness	Impact	Relevance	Sustainability
Overall Goal 1. Poverty condition in central highland region will be mitigated.			(-) Some people noted a strange smell of the treated water. But those people were using the treated water.	(+) Health and water treatment, poverty and health are essential for human life. (+) The treatment of potable water is one of important items in the rural development of Guatemala.	(+) Obligation of the treatment of potable water had been legalized in Guatemala. Thus financial and technical assistance are continuously expected from the municipality. (+) As time elapse, the benefit of the treated water will be identified by the people, and the necessity will be recognized.
Project Purpose 1. Health condition of inhabitants in Xeatzan Bajo is improved.		(+) It is expected that health condition will be improved by the treatment of water, however, a certain period is necessary to identify it.			
Outputs 1. Quality of potable water is improved. 2. Beneficiaries use improved potable water. 3. Sterilizer is properly maintained.	(+) Quality of potable water was improved. (+) Potable water was used by all the beneficiaries.				(+) The water committee learned how to maintain the sterilizer system very well.
Inputs 1. Hypo chlorinates dispenser and materials(Q 4,337) 2. House construction(Q 16,847)	(+) Quality and quantity of manpower, material, and cost were properly input for the implementation of the project.				

OVERALL EVALUATION #14
Water Quality Improvement Plan for the Existing Drinking Water

Criteria	Result	Basis
Efficiency	High	- Water quality was certainly and immediately improved.
Effectiveness	Will achieved later	- Number of patient of water born diseases is expected to be reduced, but it take certain time for identifying it.
Impact	Negative impact	- Some people noted a strange smell of the treated water. But those people were using the treated water.
Relevance	High	- The treatment of potable water is one of important items in terms of rural development of Guatemala.
Sustainability	High	- Assistance of the municipality can be received from now on. - The water committee learned how to maintain the sterilizer system very well.

Conclusion	The water quality was improved immediately after installation of the sterilizer. However the benefit of the project could not be observed quickly and clearly. The municipality starts to involve the water treatment recently and they has intention to support the project continuously.
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Recommendation <i>[Responsible agency]</i>	<p>The following items should be monitored with high priority.</p> <ul style="list-style-type: none"> - After 1 year; condition and operation status of the sterilizer. <i>[Municipality]</i> - After 1 year; status of municipality's assistance (supply of the chemical materials). <i>[MAGA]</i> - After 5 years; condition and operation status of the sterilizer. <i>[Municipality]</i>
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添付資料

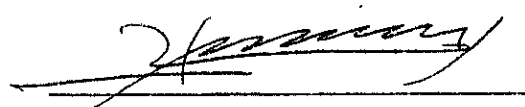
添付資料 1

実施細則

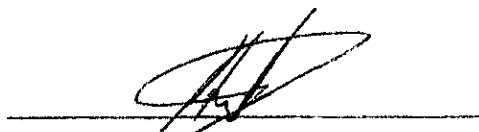
AMENDMENT
OF
SCOPE OF WORK
FOR
THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR
THE REDUCTION OF POVERTY
IN
THE CENTRAL HIGHLAND REGION
OF
THE REPUBLIC OF GUATEMALA

AGREED UPON BETWEEN
MINISTRY OF AGRICULTURE, LIVESTOCK AND FOOD
THE REPUBLIC OF GUATEMALA
AND
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Guatemala City, 5 March 2001



Mr. Ricardo Santa Cruz Rubi
Vice-minister
Ministry of Agriculture, Food and Livestock



Mr. Hiroto Mitsugi
Leader of Advisory Study Team
Japan International Cooperation Agency



Mr. Jorge Mario Calvillo
Sub-secretary for International Cooperation
for Development
Secretary of Planning and Program of the Presidency
SEGEPLAN

I. INTRODUCTION

According to the Scope of Work (hereinafter referred as "S/W") dated on 29, July 1999 for the Master Plan Study on Sustainable Rural Development for the reduction of Poverty in the Central Highland Region of the Republic of Guatemala (hereinafter referred as "the Study"), the study has been carried out in close collaboration between Japanese side and Guatemalan side.

During the course of the study, both sides have recognized the necessity of the verification study in order to prove the viability of plans and reveal unforeseeable restrictions, if any, for finalization of the M/P. Furthermore, the efficacy of the verification study would be mentioned as recommendation of the final report of the study.

As a result, Japan International Cooperation Agency (hereinafter referred to as JICA) will undertake the verification study as a part of the Study.

In response to the request signed by Vice Minister of Ministry of Agriculture, Food and Livestock, the Republic of Guatemala (hereinafter referred as MAGA) dated 6 February 2001, the present document amends the following items to the S/W with regard to the verification study.

II. SCOPE OF THE VERIFICATION STUDY

The verification study will be carried out in accordance with the tentative schedule as shown in VI (the schedule is tentative and subject to be modified if such necessity should arise during the course of the study and both parties agreed).

In order to achieve the objectives stated in the S/W, the verification study will mainly take the following approaches:

1. Increase of income by agriculture promotion and rural house-hold industry development.
2. Improvement of living conditions such as health service, sanitation and water supply, and
3. Conservation and effective use of natural resources

It should be noted that the details of each item would be determined during the verification study based upon the latest natural, economic, social and technical conditions of the study area.

III. REPORTS

JICA prepares and submits the following reports to the MAGA of the Republic of Guatemala.

1. Inception Report of the Verification Study
Five (5) copies in English and thirty (30) copies in Spanish at the inception of the Verification Study.
2. Monitoring Report (s)
Five (5) copies in English and thirty (30) copies in Spanish at the course of the verification study. The reports will be submitted periodically depending on the necessity
3. Midterm Evaluation Report:
Five (5) copies in English and thirty (30) copies in Spanish after the midterm evaluation.
4. Evaluation Report:
Five (5) copies in English and thirty (30) copies in Spanish after the final evaluation.
5. Draft Final Report of the Verification Study:
Five (5) copies in English and thirty (30) copies in Spanish after the final evaluation
Guatemalan side shall submit written comments on the Draft Final Report to JICA within one month after receiving the reports.
6. Final Report of the Verification Study:
Five (5) copies in English and fifty (50) copies in Spanish within two months after the reception of comments on the Draft Final Report from Guatemalan side.

IV. LANGUAGE

In any divergence arises about interpretation of this Amendment of Scope of Work, which is done in English and Spanish, the English text shall prevail.

V. OTHERS

Other conditions shall be based upon the S/W.

VI. Tentative Schedule for Verification Study

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Work in Guatemala																			O		
Work in Japan																					
Reports	△ IC/R				△ M/R				△ ME/R				△ M/R			△ E/R		△ DF/R			△ F/R

- IC/R : Inception Report
M/R(1) : Monitoring Report-1
ME/R : Midterm Evaluation Report
M/R(2) : Monitoring Report-2
E/R : Evaluation Report
DF/R : Draft Final Report
F/R : Final Report
O : Comments on DF/R by the Guatemalan side

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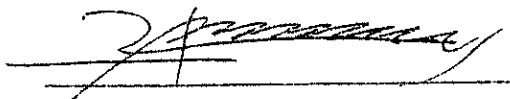
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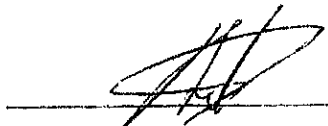
ENMIENDA
A LOS
ALCANCES DE TRABAJO
PARA
EL ESTUDIO DEL PLAN MAESTRO SOBRE DESARROLLO RURAL SOSTENIBLE
PARA LA REDUCCION DE LA POBREZA
EN
LA REGION DEL ALTIPLANO CENTRAL
DE
LA REPUBLICA DE GUATEMALA

ACORDADO ENTRE
EL MINISTERIO DE AGRICULTURA, GANADERIA Y ALIMENTACION
DE LA REPUBLICA DE GUATEMALA
Y
LA AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON


Ciudad Guatemala, 5 de marzo del 2001



Ing. Ricardo Santa Cruz Rubi
Viceministro
Ministerio de Agricultura, Ganadería y Alimentación



Sr. Hiroto MITSUGI
Líder del Equipo Asesor del Estudio
Agencia de Cooperación Internacional del Japón



Lic. Jorge Mario Calvillo
Sub-secretario de Cooperación Internacional para el Desarrollo
Secretaría de Planificación y Programa de la Presidencia
SEGEPLAN

I. INTRODUCCION


De acuerdo a los Alcances del Trabajo (en lo adelante referido como "S/W") de fecha 29 de Julio 1999 para el Estudio del Plan Maestro Sobre Desarrollo Rural Sostenible para la Reducción de la Pobreza en la Región del Altiplano Central de la República de Guatemala (en lo adelante referido como "el Estudio"), el Estudio ha sido realizado en estrecha colaboración entre las partes Japonesa y Guatemalteca.

Durante el curso del Estudio, ambas partes han reconocido la necesidad de un estudio de verificación para comprobar la viabilidad de los planes e identificar restricciones que no se hayan previsto, si las hubiere, para la finalización del P/M. Además, la eficacia del estudio de verificación sería mencionada como una recomendación del Informe Final del Estudio.


Como resultado, la Agencia de Cooperación Internacional del Japón (en lo adelante referido como "JICA") realizará el estudio de verificación como parte del Estudio.

En respuesta a la solicitud firmada por el Vice-ministro del Ministerio de Agricultura, Ganadería y Alimentación de la República de Guatemala (en lo adelante referido como "MAGA") de fecha 06 de Febrero 2001, el presente documento enmienda los siguientes puntos del S/W en lo relativo al estudio de verificación.

II. ALCANCES DEL ESTUDIO DE VERIFICACION

 El estudio de verificación se realizará de acuerdo al plan tentativo como se muestra en VI (el plan es tentativo y sujeto a ser modificado si se presenta la necesidad durante el curso del estudio y si ambas partes lo acuerdan).

Para alcanzar los objetivos expresados en los S/W, el estudio de verificación tomará principalmente los siguientes enfoques:

- 
1. aumento de los ingresos por medio del desarrollo de la agricultura e industria a nivel familiar,
 2. mejoramiento de las condiciones de vida, tales como servicios de salud, sanidad, y suministro de agua, y

3. conservación y uso efectivo de los recurso naturales.

Es necesario apuntar que los detalles de cada uno de estos aspectos se determinarán durante el estudio de verificación basado en las finales condiciones naturales, económicas, sociales y técnicas del área de estudio.

III. INFORMES

JICA prepara y entrega los siguientes informes al MAGA de la República de Guatemala.

1. Informe Inicial del estudio de Verificación:
Cinco (5) copias en Inglés y Treinta (30) copias en Español al inicio del estudio de Verificación
2. Informe(s) de Monitoreo:
Cinco (5) copias en Inglés y treinta (30) copias en Español durante el transcurso del estudio de Verificación. Los informes serán entregados periódicamente dependiendo de la necesidad.
3. Informe de Evaluación de Medio término:
Cinco (5) copias en Inglés y treinta (30) copias en Español después de la evaluación de medio término.
4. Informe de Evaluación:
Cinco (5) copias en Inglés y treinta (30) copias en Español después de la evaluación final.
5. Borrador del Informe Final del Estudio de Verificación:
Cinco (5) copias en Inglés y treinta (30) copias en Español después de la evaluación final. El lado Guatemalteco deberá suministrar por escrito sus comentarios sobre el Borrador del Informe Final a JICA en un período dentro de un mes después de recibir el informe.
6. Informe Final del Estudio de Verificación:
Cinco (5) copias en Inglés y Cincuenta (50) copias en Español dentro de

dos meses después de recibir desde el lado Guatemalteco los comentarios sobre el Borrador del Informe Final.

IV. IDIOMA

Si surgiere alguna divergencia en la interpretación de esta Enmienda de los Alcances de Trabajo, el cual se prepara en Inglés y Español, el texto en Inglés deberá prevalecer.

V. OTROS

Otras condiciones deberán basarse en los S/W.

VI. PLAN TENTATIVO DEL ESTUDIO DE VERIFICACION

Mes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Trabajo en Guatemala																			O		
Trabajo en Japón																					
Informe	Δ				Δ				Δ				Δ			Δ		Δ			Δ
	I				I/M(1)				I/EM				I/M(2)			I/E		B/IF			I/F

- I/ : Informe Inicial
- I/M (1) : Informe de Monitoreo (1)
- I/EM : Informe de Evaluación de Medio termino
- I/M (2) : Informe de Monitoreo (2)
- I/E : Informe de Evaluación
- B/IF : Borrador del Informe Final
- I/F : Informe Final
- O : Comentarios al B/IF por el lado Guatemalteco