

## 7. 質問票及び回答

# QUESTIONNAIRE and ANSWERS FOR THE DEVELOPMENT STUDY ON THE CAPACITY BUILDING/REHABILITATION AND DEVELOPMENT FOR IRRIGATION SCHEMES IN MALAWI

### ■ Clarification of the Terms of Reference (T/R)

1. Please read the modified Terms of Reference (T/R) as shown in Appendix-1 of the explanatory note and check whether the request contents are correct or not. If you find any differences from your request contents, please give us the corrected T/R.

**Answer:** We will discuss later.

2. Please describe the main contents of the Poverty Reduction Strategy Paper (PRSP), and explain the relations between the PRSP and the small-scale irrigation development.

**Answer:** The Poverty Reduction Strategy Paper, PRSP, is still under preparation. However under the strategies of the agricultural sector, irrigation, particularly small scale irrigation is very crucial because the majority of framers are small scale.

3. Prospective funding is very important for us to determine implementing the development study. The following information, however, does not indicate high possibility of prospective funding.

- (1) No description is made on the prospective funding source in the Application.
- (2) According to FAO report, irrigation has had a low priority in agricultural production in Malawi over the last 15 years, and several reasons are described. One of the reasons is reluctance of donors to fund irrigation development.
- (3) The World Bank Group's Country Assistance Strategy (CAS) Progress Report for Malawi does not mention any emphasis on irrigation despite discussing the Interim Poverty Reduction Strategy Paper (PRSP).

Only the Ministry of Agriculture and Irrigation emphasizes irrigation development according to the information that we collected. Considering these discussions, we think that most prospective funding organization of the proposed study is the Malawi government. Please explain the high possibility of funding the proposed Project.

**Answer:** The Study is come up with recommendations. We will sell them to potential donors. We hope JICA. We have some possibilities from the following facts.

- 1) IFAD funded small holder food security service projects last year. In this aid, total 10,000 trading pumps have been sold to farmers, made rehabilitation of two dams (less than 6m high) that were done by farmers in Kasungu, and conducted pilot use of motor pumps of 5pH and foot pumps in Salima ADD.
- 2) IFAD gave 15 million \$ projects during 7 years for rehabilitation of all the government schmes including Wovwe Hara, Rfiria, Boor, Kasung for, which are for both government-run and self-support schemes. New schemes' development are also included.
- 3) FAO investment center made F/S. Also FAO funded handing over management of small schemes to farmers.
- 4) African Development Bank is currently doing (1) two projects small holder irrigation project in Blantire and Sile vally ADDs, (2) Horticulture and food crop development project (3) small scale irrigation development and study before funding and (4) irrigation components of the agricultural service project.

5) DANIDA funds project sector program support including irrigation components. (Why does DANIDA help Malawi? Because Denmark had business ventures for pumps after water development for business and then many businesses have been done. Calsalg beer is one example. So Denmark made long time stay here. )

6) World Bank has no irrigation activities. But lately WB shows interests.

In addition, Dr. Malindi, Malindi said that most of projects of more than 7 million \$, but Department of Agriculture' share was zero. If 40,000ha are developed in 4 to 5 years, our fund is sufficient.

3. What is the definition of "small-scale" in the National Irrigation Policy and Development Strategy (NIPDS)?

Ex: The small scale is defined in Malawi as the scale whose beneficial area is 100 hectares or less.

**Answer:** Small scale irrigation is not well reflected in the National Irrigation Policy and Development Strategies, NIPDS. However, generally all projects up to 200 hectares are considered small-scale irrigation in Malawi.

4. What are the target crops for the small-scale irrigation development?

**Answer:** Some of the target crops are maize, leafy vegetables, beans, spices, onions, tomatoes, cabbages, carrots and okra.

5. How many sites of small-scale irrigation development should be studied by reviewing the existing studies in Phase 1?

**Answer:** As many sites as possible should be studied. For example If reviewing 700 dams is impossible, they should be reduced with factors such as money, time, capability, etc. We want to ask the Study to show samples. According to criteria, which we are going to come up with us, such as size, income, crops, potential, or others, we will reduce the numbers.

Some of the schemes have potential. Depend on types, both technical people and engineers are who are the persons to make the criteria. Of course criteria are already exists in the idea. But both technical staff and people should discuss together.

6. How many dams for rehabilitation/construction should be studied by reviewing the existing studies in Phase 1? You write in page 2 of the Application that the number of small earth dams is more than 700. Are all of the over 700 dams the review targets in Phase 1?

**Answer:** Not all dams are targets for rehabilitation. Most of the dams that are silted up or broken are the dams that the rehabilitation will target.

7. On page 2 of the Application, you mention that "the problems of small-scale irrigation development in Malawi include the scarcity of relevant studies, lack of relevant technology and low human resource capacity." On the other hand, funding is not stated as a problem. Is funding no problem for the small-scale development?

**Answer:** Funding, particularly for infrastructure capital investment for the development of the scheme is one of the major constraint to irrigation development in Malawi.

8. On page 2 of the Application, you mention that "the proposed study intends to provide detailed feasibility studies of selected schemes in order to provide both a framework for an efficient development of the irrigation sub-sector and a benchmark for future support to the sub-sector." On this sentence, there are two questions on the underlined words as shown

below.

1) Who is supposed to “select” the schemes?

**Answer:** The government together with the farmers are going to select the schemes.

2) What do you mean “sub-sector”? Please describe with specific names or examples.

**Answer:** Sub-sector means the relevant development function eg. The irrigation sub-sector within the agriculture sector.

9. On page 2 of the Application, you mention that the Study will analyze the potential for development of irrigation schemes based on perennial schemes and dams.” We have two questions as shown below.

1) What do you mean “perennial schemes and dams”?

Ex: “perennial schemes and dams” are those facilities that are active despite dropping the water level of lake Malawi.

**Answer:** This should read perennial streams (and not schemes) and dams. These are those rivers and dams which contain sufficient quantities of water all the year round.

2) What do you mean “based on perennial schemes and dams”? You mean studying the perennial schemes and dams or analyzing the reason of why these schemes and dams are perennial?

**Answer:** The study will mean conducting hydrological assessment of these resources for the potential for irrigation development.

10. Please list up the previous studies for the review. If the studies are same as shown in “1-(7)” of Appendix-1 of the explanatory note, please say so. If the studies are a part of those shown in “1-(7)” of Appendix-1 of the explanatory note, please indicate the specific study/project titles.

**Answer:** List of previous studies.

11. Regarding “Phase 1” on page 3 of the Application do the previous studies include all the dams and schemes that are currently out of use? If the **Answer** is “No”, please show approximate number of dams and schemes that should be reviewed by field survey in this proposed Study.

**Answer:** Schemes and dams to be reviewed.

12. Regarding “Phase 1” on page 3 of the Application, please describe your desirable contents of “capacity building program” with some examples.

**Answer:** Capacity building-Training of staff in irrigation development, filling of established positions at various levels particularly at ADD, RDP and EPA levels.

13. Regarding “Phase 2” on page 3 of the Application, you propose to formulate “tender documents” in this study. Does it mean that a commercial construction company carries out the construction by contract?

**Answer:** It will depend on the size of the project. The preparation of the documents, especially cost estimates will be important in order to have some reflection on the finances required to implement the projects. Of course as a matter of fact, the farmers participate through all the stages in the development of self-help irrigation schemes.

14. If the **Answer** is “Yes” for the above question, why don’t you construct the schemes with beneficiaries (farmers) under your supervision? Considering the following discussions, we

think applying commercial construction companies is not appropriate.

- (1) Through their participation, the beneficiaries can be trained for maintenance.
- (2) Applying the commercial construction company contradicts the government policy that emphasizes the importance of beneficiary participation in the identification, design, construction, and management of small-scale irrigation schemes as stated in the first paragraph on page 2 of the Application.
- (3) FAO reports that the Malawi government has already conducted self-help smallholder schemes of 6,500 hectares with 32,500 households in farmers' participation.

**Answer:** Construction Company should fully involve farmers on the job for maintenance like Konoike. By the end of construction, farmers should be involved. Capacity is not enough for the department and thus we will make contract with commercial sector. Many staff went to commercial company. (The Team requested the list of companies.) We will give you the list of companies.

15. Why tender documents are not listed up as the outputs on page 6 of the Application?

**Answer:** Include tender documents as one of their outputs.

16. According to the other relevant projects, the African Development Bank has already a countrywide study on potential for irrigation development. You mention no detailed assessment and no economic or financial feasibility as the reasons why previous studies are not applicable on page 5 of the Application. This explanation indicates the reason of Phase 3 activity of page 2 in the Application. You have not explained why Phase 1 and Phase 2 activities (page 2 in the Application) are necessary although the countrywide study has already been done. Therefore, please describe the reason why you propose Phase 1 & 2 activities for the JICA Study. We think you have already identified high potential schemes with the previous studies.

**Answer:** The African Development Bank (AfDB) study has just finished for Phase I that is for the data collection. What ADB is going to be done is identifying potential irrigation area with GIS. You can use it. AFD's study is doing now. (The team requested to give the TOR, and the Malawi side accepted, and obtained later.) Phase I is the data collection for all the 27 districts. Phase II is reducing the number of projects in three months after starting Phase II. Phase III is broadly selecting five possible projects and then reducing to three projects.

17. What do you request for the objective of "design proposals for the development of the irrigation potential of Malawi, and will lead to the implementation of a number of highly feasible schemes" in page 5 of the Application? Do you need construction works in the Study? If so, please describe them concretely.

**Answer:** From study, we will find funds to sell the study results to any aid body. Depending on the scope, we want to advise us to do. Rehabilitation is needed.

18. What study do you request in "Socio-Cultural Aspects and Beneficiary Participation" shown on page 5 of the Application?

**Answer:** Social network should be considered in the study. If study for culture is not carry out, it will make problems. For example on river direction, if there are two villages for the same canal, they cannot work together for example. In some area, local counterparts should tell you some culture.

(Is there any conflict on water right?) Some of scheme requests water right. Maybe some areas, there are some distractions on water right. From my personal point of view, if water right is given, I don't think that any conflict exist.

Beneficialies' participation is important to sustain particular systems for them who are involved in labor works.

19. What study do you request in "Institutional and Management Aspects" shown in page 6 of the Application? It means proposing institutional arrangement? Please explain it specifically.

**Answer:** Institutional development is capacity building of system department on irrigation capacity to supervise. If no of the headquarters do not help them, irrigation institution should help people to conduct in-house training for farmers. Institution means all the irrigation subsectors.

20. What do you mean the sentence of "Development of selected number of high potential projects" shown in page 6 of the Application? Since the word of "Development" indicates construction works for facilities in some cases, we think that you request to conduct construction works in the high potential projects in this Study.

**Answer:** Selected high potential sites are those sites that rank very high with reference to the chances for development. These sites are economically feasible, financially viable, with not bad effect on the environment.

21. We understand that the expected contents of the support in the sentence of "Support to training institutions such as Bunda College of Agriculture" shown on page 6 are the followings.

- 1) Improved irrigation laboratories
- 2) Setting up of irrigation demonstration farms
- 3) Provision of equipment for computer aided design systems

Is our understanding correct?

If your answer is "Yes", please understand that these may be outside of the study works because the Development Study is software work although the above works are hardware ones.

**Answer:** Our requests are training more staff. As looking at the Bunda, we already do not want to. They have already been trained. On capacity building, if Bunda staff is trained, some of the trained staff members will work in the Irrigation department or in private companies. Therefore, we request to support Bunda. Bunda has no equipment.

22. You show total six outputs of the study on page 6 of the Application. Please indicate the priority among the six outputs. In this case, one priority is given to one output. Please do not indicate the same priority to several outputs.

**Answer:** Priorities to outputs will be shown later.

23. Although you informed total seven relevant projects/studies, only three are listed up in the available data and information. Aren't the other four project/study documents available?

**Answer:** Answers are as follows.

- (1) DANIDA Agricultural Sector Support Program: We can provide paper on DANIDA.
- (2) Irrigation study by AFDA: As we already said above, we will give the TOR.
- (3) Small holder irrigation project funded by the AfDB: We have it.
- (4) The national and Shire Irrigation Study: we have. Now nobody knows where it is.

- (5) Kasungu Water Resources study: Not available
- (6) Countrywide exercise: I have to find out someone who knows where it is.
- (7) The National Water Resources Masterplan : We have it. But we look for carefully.

**■ General information on agriculture**

24. They say that the damage caused by the hippo is one of the biggest restriction factors of crop cultivation. What are the area and the amount of damage by the hippo? What is the wild animal protection policy in your country?

**Answer:** This only common around the lakeshores and along some major rivers and is not widespread across the county. These animals are indeed protected by wild life policy.

25. What are the supply system and the prices of production materials such as fertilizers and pesticides?

**Answer:** Fertilizers and pesticides are available at various outlets throughout the country. The prices are relatively high and most small holder farmers find it difficult to access such farm inputs.

26. Please give information on agricultural-products prices in the market.

(The preliminary study team cancelled this question.)

27. What is the present cultivation method? Whether or not do you have an improvement target in the methods?

(The preliminary study team cancelled this question.)

**■ Others**

28. Please give the list of consultant firms and institutions capable of carrying out inventory surveys of irrigation schemes with detailed information (name, address, size, major activities/field, etc.).

### ■ Additional questions

29. What is “IFAD” written in page 9 of “OVERVIEW OF THE IRRIGATION SUBSECTOR”? Please show the full spell.

**Answer:** IFAD is International Fund for Agricultural Development.

30. When did you present “Draft National Irrigation Policy and Development Strategy”?

**Answer:** Draft of National Irrigation Policy was finalized in June 2000. The contents are modified from the final one.

31. When did you hold the workshop on the International Review of the Irrigation Sub-sector?

**Answer:** National Irrigation Development Program is different from National Irrigation Policy. This is a program. But it has been changed.

32. What is “Informal Irrigation” shown in page “iv” of “OVERVIEW OF THE IRRIGATION SUBSECTOR”? Please describe with specific examples.

**Answer:** Informal irrigation is where no formal irrigation system layout in place. Example includes the use of residual moisture in the upland dambo wetlands and the use of flood water in the flood plains.

33. What is “Traditional Irrigation” shown in page “iv” of “OVERVIEW OF THE IRRIGATION SUBSECTOR”?

**Answer:** This is the use of the traditional watering cans and pails for irrigating particularly in dimbas.

34. Who has the Water Right?

**Answer:** The one who has water right is that person who has applied for the right to use a defined quantity of water and such a right is granted by the water resources board.

35. How is the Water Right defined?

**Answer:** A water right is defined as the right to abstract and use a specified amount of water.

36. What is “Upland Dimba”?

**Answer:** Upland dimba is a garden normally for growing crops in the upland wetlands.

37. What is “Dimba crop” shown in page “iv” of “OVERVIEW OF THE IRRIGATION SUBSECTOR”?

**Answer:** Dimba crop is that crop grown in the upland dimba.

38. Is “National Irrigation Development Programme” shown in page 8 of “OVERVIEW OF THE IRRIGATION SUBSECTOR” same as “National Irrigation Policy”?

**Answer:** National Irrigation Development Program is different from National Irrigation Policy. This is a program. But it has been changed.

39. Please describe outline and published date of Malawian Agricultural Sector Investment Program (MASIP).

**Answer:** MASIP is Malawi Agriculture Sector Investment Process.

40. JICA made development study of three projects which are Lower Nadzipulu Project (250ha),

Upper and Lower Namikokwe Project (800ha) and Lower Livulezi Project (520 ha), and carried out the grant aid for Upper and Lower Namikokwe Project (800ha) to realize the study output. Have the other two projects realized with funding?

**Answer:** No they have not.

41. If your **Answer** is “No.” for the above question No.40, please describe how will you realize the JICA study outputs of the two projects in the future?

**Answer:** Basically, same story. At the moment, we are looking at somebody to assist implementation of these two sites..

42. What are the present activities of the other donors on agriculture for Malawi?

**Answer:** Activities of other donors

- DANIDA: Development of the upland dambo wetlands and rehabilitation of earth dams and providing institutional support to the development of irrigation, training institutions and district assemblies.
- ADP ShiP: Small Holder Irrigation development using treadle pumps in Blantyre and Shire Valley ADDs. HFCP: Promotion of horticultural crops in Muzuzu, Kasungu, Salima and Lilongwe ADDs, and the conduction of a county wide Irrigation Sector Study.
- IFAD: Development of flood plains including construction and rehabilitation of irrigation schemes in Salima, Machinga and Karonga ADDs.
- EU: Rehabilitation and extension of Lifuwu Irrigation Scheme.

Additional discussions at the first meeting.

Since Dr. Malindi was leaving, the Team discussed with him about reducing possibilities.

Food security, small scale irrigation, beneficiaries owned and operated themselves are important keywords. The Team said “Following your concept of using Japanese technology, we will use gravity irrigation for small scale”. Dr. Malindi made comments to look at all the possibilities and then make decisions. Dr. malindi said “Better see that facts”. He said “We tried motor pump, and the pump had problems, but gravity had also problems”. Investment cost per hectare is as low as possible. According to WB, they respect investment per cu.m of water. We should give each people as many as possible. The Leader said that the gravity cost was not high. Dr. Malindi said “it depends on. If 12 ha is irrigated by a motor, the cost is high. If the area is expanded, the cost becomes low. Pump is most efficient due to easiness of individual. Gravity needs grouping people.”

Dr. Malindi said “Our original plan is making rehabilitaion of four schemes because others are being rehabilitated. Most of schemes in south are closed. New schemes exist in the central part or north. Main request is rehabilitation of Mona, Nkate, Rikangara and Linpasa schemes, which have no donor and exist in the south except Limpasa.”

Dr. Malindi said on focusing area that it was no problem even in north.

END



## 8. 収集資料リスト

番号	資料の名称	形態	種類	発行機関
1	VISION 2020 THE NATIONAL LONG-TERM DEVELOPMENT PERSPECTIVE FOR MALAWI (2000)	オリジナル	収集資料	National Economic Council
2	NATIONAL WATER RESOURCES MASTER PLAN ANNEX1 GENERAL (1986)	オリジナル	収集資料	Department of Technical Cooperation for Development, UN
3	NATIONAL WATER RESOURCES MASTER PLAN ANNEX2B SURFACE WATER RESOURCES APPRAISAL WRA 1 TO 5 (1986)	オリジナル	収集資料	Department of Technical Cooperation for Development, UN
4	THE NATIONAL IRRIGATION DEVELOPMENT PROGRAMME 1996-2006 (1995)	オリジナル	収集資料	Department of Irrigation, Ministry of Agriculture
5	STUDY ON SELF-HELP IRRIGATION COMMUNITIES VOLIME1 – PART1 / MULTICRITERION ANALYSIS REPORT / RANKING AND DESCRIPTION OF SITES IN MZUZU ADD AND BLANTYRE ADD (1992)	オリジナル	収集資料	Department of Irrigation, Ministry of Agriculture
6	STUDY ON SELF-HELP IRRIGATION COMMUNITIES VOLIME1 – PART3 / MULTICRITERION ANALYSIS REPORT / RANKING AND DESCRIPTION OF SITES IN MZUZU ADD AND BLANTYRE ADD (1992)	オリジナル	収集資料	Department of Irrigation, Ministry of Agriculture
7	STUDY ON SELF-HELP IRRIGATION COMMUNITIES VOLIME1 – PART4 / MULTICRITERION ANALYSIS REPORT / RANKING AND DESCRIPTION OF SITES IN MZUZU ADD AND BLANTYRE ADD (1992)	オリジナル	収集資料	Department of Irrigation, Ministry of Agriculture
8	APPRAISAL REPORT / SMALLHOLDER IRRIGATION PROJECT	オリジナル	収集資料	African Development Fund
9	AGRICULTURAL SECTOR PROGRAME SUPPORT IRRIGATION COMPONENT / INSTITUTIONAL CAPACITY AND TRAINING NEEDS ASSESMENT / FINAL REPORT (1998)	オリジナル	収集資料	PEM CONSULT
10	LAND RESOURCES EVALUATION PROJECT / LAND RESOURCES APPRAISAL OF SALIMA AGRICULTURAL DEVELOPMENT DIVISION (1992)	オリジナル	収集資料	Ministry of Agriculture / UNDP / FAO
11	LIWILEZI IRRIGATION PROJECT / FEASIBILITY STUDY (1991)	オリジナル	収集資料	Ministry of Agriculture
12	MAPS ILLUSTRATING DEBELOPMENT PROJECTS 1976 / 77-1978 / 79	オリジナル	収集資料	Government of Malawi
13	ECONOMIC REPORT 2000	複写	収集資料	National Economic Council
14	ECONOMIC REPORT 2001	複写	収集資料	National Economic Council
15	Malawi Poverty Reduction Strategy Paper DRAFT(2001)	複写	収集資料	Government of Malawi
16	Profile of poverty in Malawi, 1998	オリジナル	収集資料	National Economic Council
17	DETAILED TABLES FOR A POVERTY PROFILE OF MALAWI From the poverty analysis of the Malawi Integrated Household Survey, 1997-199 (revised 2000)	オリジナル	収集資料	Poverty Monitoring System, Government of Malawi
18	Contriv's Poverty Profile / Final Report	オリジナル	収集資料	Adaran Johnson Associates (JICA)
19	1998 MALAWI POPULATION AND HOUSING CENSUS / REPORT OF FINAL CENSUS RESULTS / POPULATION DENSITY(2000)	オリジナル	収集資料	National Statistical Office
20	NATIONAL IRRIGATION POLICY AND DEVELOPMENT STRATEGY (June 2000)	複写	収集資料	Ministry of Agriculture and Irrigation