



Enabling poor rural people
to overcome poverty

Republic of Mozambique

Artisanal Fisheries Promotion Project (ProPESCA)

IFAD Loan No. 822-MZ

Coastal HIV/AIDS Prevention and Nutrition Improvement
Project (CHAPANI)

BFFS grant G-BG-48-MZ-CHAPANI



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Front cover: Dried fish at the fish market in Belenenses, Nampula. The market has benefited from works under the Support Programme to the Food Production Action Plan (PRO-PAPA), however the fish is still sold under poor conditions. In particular, the coordination between the municipal council and the market management needs improvement, and market cleanliness requires more attention.

Back cover: High-value fresh fish, photo taken at Belenenses market, Nampula. / Small fishing boats in Moma, Nampula. In order to go out to open sea, stronger, bigger and safer boats will be required.

All photos by Irshad Khan

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Currency Equivalents, Weights and Measures, Fiscal Year

1 USD = 30 MZM

Metric system

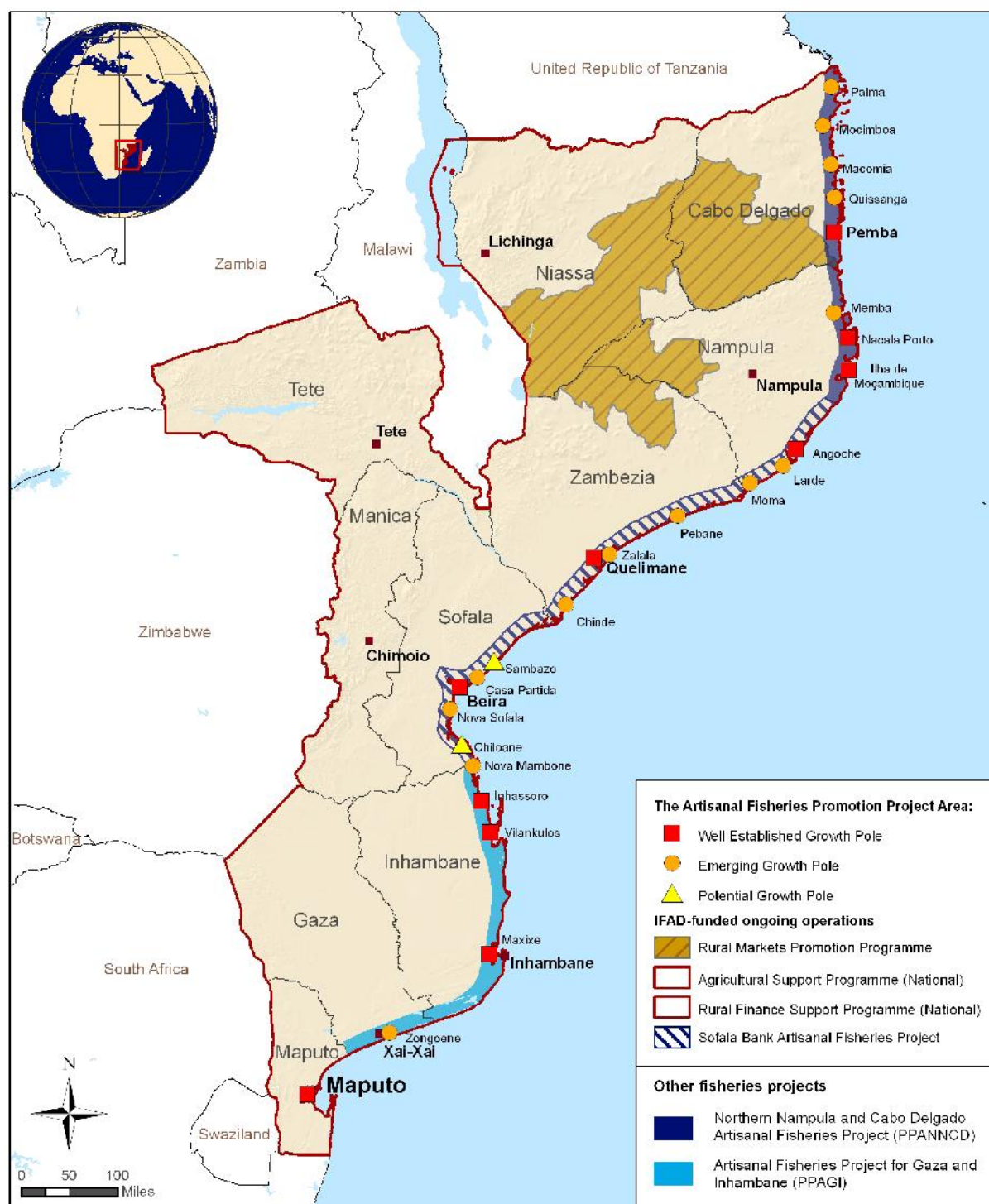
Fiscal Year: 1 January – 31 December

ABBREVIATIONS AND ACRONYMS

AMODER	<i>Associação Moçambicana Para o Desenvolvimento Rural</i>
ANE	National Roads Authority
CCP	Community Fishing Council (<i>Conselho Comunidade das Pescas</i>) or co-management committee
COSOP	Country Strategic Opportunities Paper
ADNAP	National Fisheries Administration
DPOPH	Provincial Directorates of Public Works and Housing
EDM	<i>Electricidade de Moçambique</i>
FFP	Fisheries Development Fund (<i>Fundo de Fomento Pesqueiro</i>)
FFPI	Small Industry Development Fund (<i>Fundo de Fomento de Pequena Industria</i>)
HQ	Headquarters
IDPPE	Institute for Development of Small-Scale (Artisanal) Fisheries (<i>Instituto de Desenvolvimento da Pesca de Pequena Escala</i>)
INIP	National Institute for Fisheries Inspection
IIP	Institute of Fisheries Research (<i>Instituto de Investigação Pesqueira</i>)
IOF	Innovation and Outreach Facility (of RFSP)
M&E	Monitoring and Evaluation
MFI	Microfinance institution
MoU	Memorandum of Understanding
NGO	Non-governmental organization
PAG	Public Audit Group
PAMA	<i>Programa de Apoio aos Mercados Agrícolas</i>
PARPA	National Action Plan for Reduction of Absolute Poverty
PCCG	<i>Project Consultative and Coordination Group</i>
PCR	Rotating savings and credit groups (<i>Poupança e Crédito Rotativo</i>)
PCU	Project Coordination Unit
PESPA	Strategic Plan for the Artisanal Fisheries Sub-Sector
PPABAS	Sofala Bank Artisanal Fisheries Project
PPAGI	Fisheries Project for Gaza and Inhambane
PROAGRI	National Programme for Agricultural Development
PPANNCD	Northern Nampula and Cabo Delgado Artisanal Fisheries Project
PRONEA	National Programme for Agricultural Extension
PSP	PRONEA Support Project
PY	Project year
RFA	Revolving saving and credit association (<i>Poupança e Crédito Rotativo</i>)
RFSP	Rural Finance Support Programme
RIMS	Results and impact management system
RMF	Risk Mitigation Fund
TA	Technical Assistance

Mozambique

The Artisanal Fisheries Promotion Project and other IFAD-funded ongoing operations



13-10-2010



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD

REPUBLIC OF MOZAMBIQUE
Artisanal Fisheries Promotion Project – 822-MZ

Supervision Mission: 3 – 14 September 2012

Aide-mémoire

A. Introduction¹

1. The ProPESCA development goal is to improve incomes and livelihoods of households involved in artisanal fisheries. Its purpose is to increase the volume of high value fish on a sustainable basis and increase the returns obtained from traded fish. It will invest USD 43.5 million over seven years on the whole coastline, with IFAD financing USD 21.1 million and OFID USD 13.5 million. Some 26 growth poles, in 7 provinces along the coast line, were identified within 24 districts to participate in ProPESCA, representing about half of the 51 coastal districts of Mozambique. ProPESCA was approved by the IFAD Executive Board in December 2010, and declared effective in March 2011. The OFID loan was declared effective in January 2012.

2. The project is making investments in the fish value chains at the participating growth poles. These will include strengthening fisher capacity, fish market and related infrastructure, input and output traders and community as well as national and district government capacities to manage artisanal fisheries sustainably. There are four components – Supporting development of Higher Value Fish; Improving Economic Infrastructures; developing Financial Services and Institutional Strengthening, Policy Initiatives and Project management.

3. Parallel to and linked to ProPESCA, IFAD administers a grant from the Belgian Fund for Food Security (BFFS) for the Coastal HIV/Aids Prevention and Nutrition Improvement Project (CHAPANI), effective from May 2012, with the overall goal to improve food security and livelihoods of households involved in artisanal fisheries. The grant recipient Associação Moçambicana Ajuda de Povo para Povo (ADPP) will mobilise people in the fishing communities to increase their knowledge of and change risky sexual behaviour and (as of the second year) diversify their regular diet.

4. This mission has been the first full implementation support and supervision mission to the projects, and was required to supervise both ProPESCA and CHAPANI, seeking to assist the implementation of project activities and to facilitate the integration and complementarities of the activities envisaged. It worked in Maputo, and undertook field missions to Moma and Angoche Districts in Nampula Province.

5. The team wish to express their appreciation for the constructive and collaborative approach shared with it by IDPPE, the ProPESCA implementation team and the provincial and district administrations, delegations, implementing agencies and importantly the many fishers and traders that we were able to meet.

6. The content of this Aide Memoire is subject to separate confirmation by IFAD management by way of a management letter.

B. Overall Assessment of Project Implementation Progress

7. Overall, the mission is pleased with the progress by the PCU towards effective implementation of project activities following the IFAD follow-up mission last February. The launching of ProPESCA in the three provinces of Maputo, Gaza and Inhambane, completed the cycle of project launching activities initiated during the second semester 2011.

^{1/} Custodio Mucavele, Team Leader/IFAD Country Officer, Tomas Donnelly, Fisheries Development Expert, Irshad Khan, Rural Engineer, Rita Macuacua, Nutritionist, David Rendall, Project Management Expert, Manuel Rochafontes, Financial Management Expert, and Jorma Ruotsi, Rural Finance Expert. The Mission was joined for its final period by Claus Reiner, CPM, IFAD. Logistics and other support was provided by Ana Cipriano Zandamela, Administrative Assistant, IFAD Country Office.

8. Despite delays with project integration in e-SISTAFE, it has been finally established and it is now operational at PCU level and implementing agencies. Training to IDPPE staff is on-going and the bank accounts have been opened. The AWPB has been revised and IFAD NO has granted. The delayed establishment of e-SISTAFE, imposed some delays for the effective start of core planned project activities, including the participatory planning at growth-pole level, and the elaboration of the growth pole investment.
9. Nevertheless, guidelines for planning at Growth Pole (GP) level were finalised, the planning process has already initiated and three action plans prepared for Moma, Angoche and Larde, facilitated by a team of senior IDPPE staff, with involvement of local authorities and beneficiaries. This was a remarkable effort by the PCU and the mission is pleased with the quality of the GP planning process and the investment plans produced with involvement of the local authorities and beneficiaries.
10. The establishment of MOUs with key stakeholders is making increasingly positive progress with all expected to be in place by mid-October 2012.
11. The conclusion of works and the effective functioning of the market facilities, however remains a challenge that requires close coordination and a recognition by local governments, municipal authorities and the traders and fishers who will use the facilities that these are business enterprises.
12. Under the provision of financial services, activities supporting the provision community-based financial services have not yet started pending recruitment of the Rural Finance Specialist while the Risk Mitigation activities have made only slow progress.
13. Overall, the project is well managed by a dedicated and committed team. The annual work plan and budget has been adjusted following the project integration into e-SISTAFE and the Technical Assistance envisaged in the project is being integrated into the PCU. IDPPE staff involved in ProPESCA at central and provincial levels received training on e-SISTAFE and M&E. The mission is pleased to see that ProPESCA has now in place most of the basic instruments for a solid and effective implementation.

C. Outputs and Outcomes, by Component

Component 1 – Supporting Development of Higher Value Fish (USD 9.3 million)

14. There are two main aspects to developing this critical component that is based on investments in the applicable value chains. Firstly, small scale fishing systems development and secondly the processing and marketing from “first point of sale” through to the provincial retail markets.
15. With regard to strengthening the capacity of small fishers to catch and sell higher value fish in greater quantities, the review of the experiences from PPABAS and other recent development investments has not yet been carried out. This is due to the delay in the recruitment of the fisheries and the value chain specialists. The intention is to develop “best practice” approaches that can be adopted in the various delegations with regard to (i) group enterprises and (ii) the promotion of improved fishing practices and post-harvest fish handling. It is expected that the review will take place later this year with the outcomes of the study being available for review and adoption in February 2013. In the meantime the mission has focused on developing a feasibility study methodology based on the “Senegalese pirogue”. Once the overall fisheries review has been concluded then the approach developed here can be reviewed and adopted for consideration and use for a full range of new fishing methods. In order to support this, it is suggested that material be developed to illustrate the benefits and costs of the fishing operations which can be done with pirogues and other boats.
16. The assessment, monitoring and review of the fisheries resources are discussed under component 4.

17. The situation with regard to the operation of markets, especially “point of first sale” markets is very different. The necessary methodological review was carried out in late 2011 under PROPAPA and a well-researched operational plan for markets developed that was based on transfer of the facility to the local authority with e.g. ice making tendered out to the private sector and market management committees (comprising traders and fishers). Unfortunately there is little evidence of markets operating effectively. This is due in the main to neglect by the local authority, issues about how the market revenues should be managed and to some extent the capacity of the management committees to perform their designated functions. Clearly there is still a need to review the current management structure between the district authorities and the management committees at the first-point of sale and municipal markets. This is in order to ensure that robust and fair agreements ensuring the operation and maintenance of the markets are in place. The “brain-storming session” held has established a sound base for alternative approaches to be considered and developed as appropriate.

18. During the two previous fisheries programmes, problems in the supply of fishing equipment have been successfully solved through active co-operation between IDPPE and the leading input supply companies in the private sector. Now that ProPESCA covers the whole coast line, it was agreed that the same partnership approach will be applied also in the Growth Poles in the north and in the south. The visited input suppliers indicated their willingness to expand their operations into new fishing communities, if adequate demand for fishing inputs can be demonstrated.

Table 1

Agreed action	Responsibility	Agreed date
1. Urgently complete the review of fishing extension options	Fisheries Technologist and Value Chain Specialist	30 Nov 2012
2. Develop a standard approach to assessing alternative fishing systems	PCU	30 Nov 2012
3. Review current market model and follow-up urgently with local authorities	PCU	31 Oct 2012
4. Continue development of alternative market operating models	PCU	On-going
5. Develop I/P supply in GPs with private sector	PCU	On-going

Component 2 – Improving Economic Infrastructure (USD 13.7 million)

19. Work in developing the Economic Infrastructure activities has started based on the findings of the first three GP planning exercises and the very useful consultant’s report on priorities and procedures for this component. These have highlighted the importance, given by the widely representative stakeholders, to improved road access and electricity supply. Pending the outcome of the remaining GP exercises this demand indicates that there will be inadequate resources to cover the full needs of the 26 GP plans. As a result the Mission has had preliminary discussions with the PCU that has led to the preparation and adoption of an effective set of selection criteria for these capital intensive works. These criteria that are based on socio-economic needs, potential fishing activity and the cost need to be fully developed and included in the PIM. These will need to apply both within and across growth poles. The revised unit costs for the three sub-components (roads, electrification and alternative energy) were reviewed with the PCU and found to be appropriate.

20. MoUs have been prepared for the access roads and shared with the implementing agencies. Comments have been received from ANE and FE. To facilitate the implementation of the roads it is agreed that the ANE will recruit a roads design engineer to prepare design and approval documents. ANE will manage the road contracts and have them certified independently as was the case under PPABAS. Payment for works will be made through the FE which uses the e-SISTAFE financial management system thus providing the necessary separation of implementation and payment authorities. Management and procurement methods are found to be suitable and will provide for timely and cost-effective implementation of project.

21. It is important, where access roads are to be maintained with the involvement of the local community that adequate capacity building exercises are carried out.

22. MoUs have been prepared for the rural electrification activities and shared with implementing agencies. The MoU with FUNAE, for the development of alternative energy options has just been signed. Funds for these activities will be channelled directly to FUNAE. Responses from EDM and MoE are expected shortly. The funds for the works conducted under the tripartite agreement, to be signed shortly will be released through the Ministry of Energy. The mission has further reviewed the methodology developed, and finds it appropriate. Management and procurement are found to be suitable and will provide timely and cost-effective implementation of project. There will be a number of potential electrification links that if implemented will use considerable resources. Wherever possible the PCU needs to seek support from MoE resources to enable all such critical schemes to proceed within the available project funds.

23. During the Mission particular attention was paid to developing an initial pilot programme using solar energy to directly make ice rather than generating electricity and using that to ice maintenance. A concept note has been prepared on this approach to solar ice making. The detailed proposal needs to be completed. If confirmed it will be necessary to include financial provision for this innovative test, in the AWPB revision that will be done in October. The pilot will be conducted in 2 phases – the first to test the methodology under Mozambique conditions and if successful a second phase will assess the usefulness, viability and durability of the system in remote locations.

Table 2

Agreed action	Responsibility	Agreed date
6. Develop selection criteria for economic infrastructure projects	PCU(Engineer)	15 Dec 2012
7. Recruit road Design Engineer	ANE	31 Jan2013
8. Strengthen O & M capacity building	PCU	On-going
9. Investigate supplementary funding for electrification	IDPPE	31 Mar 2013
10. Finalise alternative energy pilot scheme	Mission/ (engineer) PCU	30 Sept 12

Component 3 – Developing Financial Services (USD 8.7 million)

24. **Plans for 2012 and Overall Progress.** The 2012 AWPB allocation for the whole component was USD 641,000, correctly following the plans agreed on in late 2011. It is very important that all the changes agreed in this Aide Memoire will be fully reflected in the AWPB for 2013. By the time of the Mission, no funds under Component 3 have yet been spent. This is largely related to the fact that IDPPE/ProPESCA has very little in-house capacity in rural finance, and the main responsibility in component implementation was to be with the externally recruited TA. However, the recruitment of the long-term Rural Finance Specialist (RFS) has faced serious delays. The main reason for these delays is reported to be the bureaucratic process in the recruitment of foreign TA. It is now assumed that the successful candidate will start in ProPESCA in October 2012, some six months later than was planned. With this delay, practically all Component 3 activities still remain to become operational.

25. In this overall situation, the main tasks for this Mission became forward-looking: to assess whether the proposed interventions still fit the current implementation environment, to propose changes in activities when needed and to support ProPESCA in making the component operational without further delays. Agreements reached in these areas are briefly recorded below.

ASCAs and Other Community-Based Financial Services

26. The core target of this sub-component is to substantially increase the number of women and men participating in community-based financial arrangements around ProPESCA Growth Poles. At the same time, focused efforts would be made to improve the methods used in PCR promotion and to actively link the groups and their members to formal MFIs and other financial institutions.

27. The strategy of ProPESCA in the establishment of new ASCAs was planned to be to use experienced ASCA promoters to train new ASCA promoters so that this activity could effectively be implemented in all ProPESCA provinces. This ASCA promoter training was planned to take the whole first year of the project period, to be followed by a request for bids by ASCA promoters to start the

actual field operations. It, however, appears that today, a larger than expected number of competent ASCA promoters operate in the country and are willing to bid for operations around the ProPESCA Growth Poles. This includes areas such as Cabo Delgado, which were outside the PPABAS activity and have very few PCRs in the fisheries areas. In this situation and to avoid any further implementation delays it was agreed that (i) the RFS will by mid-November 2012 conduct a mapping of competent and interested ASCA operators in all coastal provinces, (ii) in provinces where there is an adequate number of such promoters, ProPESCA will during the first quarter of 2013 request for bids to establish ASCAs around the Growth Poles, and (iii) ProPESCA will organise ASCA promoter training only in those provinces where this is required to reach the project targets; this potential training would be conducted in the first half of 2013, followed by a request for bids to the trained ASCA operators to work in the ProPESCA villages. Budgets for this whole activity in the AWPB 2013 will be based on the above approach.

28. The target to develop the ASCA method still remains very valid. This covers both the way the ASCAs themselves operate in savings and credit and the manner they can be connected to the more formal financial market. It was agreed that as one of his first tasks, the RFS will draft the TORs for a 3-month international TA to develop the ASCA approach in fisheries communities, with a target of having this TA operational in ProPESCA by February-March 2013. After a diagnostic study, this short-term TA is expected to make proposals on how to make the ASCAs more investment-oriented in their operations, for instance by retaining funds after each cycle to reach higher lending levels or by directly investing the funds at the end of each cycle in business activities. Further, the proposals should include the ways of how to link the mature ASCAs to SACCOs, formal village banks and MFIs, of which operations there are various experiences emerging in Mozambique and elsewhere in the region. The recommendations of the short-term TA should be practical and implementable in the fisheries environment. ProPESCA has the budgets to implement later these improved ASCA methods among the ASCAs in the coastal communities.

29. In the ProPESCA design, business development services (BDS) were seen as critical complementary components to financial services for improving the entrepreneurial capacity of the economic actors at the lower end of the artisanal fishing chain. The findings of this Mission again confirmed this assumption: moving to the more advanced stages of economic activities requires new skills and often also changes in the mindset. It was agreed that ProPESCA will develop a systematic approach for its BDS operations, applicable to all types of ProPESCA activities. The key responsibility in this design work will be with the RFS and the Value Chain Specialist, together with the Programme Coordinator. The first step in this activity is to map the potential providers of these services in the country. An approach using multiple service providers may be advisable because of the differences in the tasks involved in different activities and the geographic realities of the fisheries sector. The basic element to build on was agreed to be a substantial BDS module to be included in the approach of each ASCA promoter. For the more advanced services, appropriate private sector service providers are expected to be available for BDS operations in the Growth Poles.

Financial Services for Fisheries Value Chain

30. The general lack of registered financial institutions in or close to the Growth Poles continues to be a serious bottleneck for economic development. Two separate ProPESCA allocations were planned to respond to this situation using similar approaches: Support to Formal CBSPs (USD 600,000) under sub-component 1 and support through FARE/IOF (USD 800,000). Both activities were planned to attract banks, microbanks and MFIs to the Growth Poles using matching grants, preferably combined with line of credit funds.

31. There has been no progress in the first option, particularly as the recruitment of the RFS is delayed. Concerning FARE/IOF, a draft MoU for the ProPESCA/FARE co-operation was developed in early 2012. This, however, was never signed. The April 2012 Implementation Support Mission of PAFIR expressed serious concerns about FARE's ability to fulfil the responsibilities foreseen under the draft MoU. Consequently, it was agreed that "ProPESCA will continue negotiations with FARE only when FARE's liquidity situation improves to a level, in which FARE would be able to fulfil its credit line commitments to ProPESCA". A follow-up mission to FARE will be organised in late

September 2012 and its conclusions on this issue will be included in the Technical Report of this ProPESCA Implementation Support Mission.

32. As the entry of new financial institutions to Growth Poles is crucial for the ProPESCA investment operations, the Programme has started to plan for alternative options to reach the agreed development results in this area. A preliminary allocation of the new EU-MDG funds includes USD 1.9 million for a credit line for those financial institutions that operate in or near the Growth Poles and are willing to finance fisheries value chain investments. This, together with the above indicated USD 1.4 million available from the ProPESCA/IFAD budget for matching grants, constitutes a substantial resource, the use of which needs to be carefully planned. It was agreed that ProPESCA and especially the RFS follow up the situation concerning the potential ways of implementing this support activity, with the target of finding the best institutional arrangement by the first quarter of 2013.

33. As a part of sub-component 2, the ProPESCA allocation (USD 600,000) to the Risk Mitigation Fund (RMF) operation follows an investment made under PPABAS during the latter years of its implementation. The RMF was established in GAPI. PPABAS invested USD 250,000 to this fund, GAPI USD 150,000. However, the RMF operations have progressed slowly. The SLA between GAPI and the MoF was signed just before PPABAS was closed. Even with the RMF, it has been difficult to find banks or MFIs to invest in the artisanal fisheries value chain. In this situation GAPI started to finance fisheries operations from its own funds covering 50% of the loan amount, the remaining 50% coming from the RMF. In 2012, ten such loans have been issued to the total value of USD 48,517. Another 25 loans are currently under different stages of processing, with a total value of USD 208,609. The approved and disbursed loans are for fish marketing and basic fishing gear, while the new applicants aim to borrow more for more expensive fishing gear, including outboard engines. With this current arrangement, GAPI takes about 70% of the risk of the loans. If another bank would be involved, GAPI's maximum share of the risk would be around 19%. Clearly, GAPI, ProPESCA and the Mission all recognise that the current arrangement is not ideal and does not fully serve the intended purposes. At the same time some new financing has been introduced to fishing communities.

34. The Mission discussed the RMF issue in detail with the management of GAPI. In these discussions, the following arrangements were agreed on: (i) marketing meetings will be organised in key Growth Poles in the next three months jointly by GAPI and ProPESCA particularly for financial institutions to demonstrate to them that low-risk investment options exist when operating with the RMF support, (ii) the Regulations on the RMF operations will be finalised and signed between ProPESCA and GAPI, and (iii) the RMF Management Committee will be established, consisting of representatives of IDPPE, GAPI and Fundo de Fomento Pesqueiro (FFP) to meet quarterly to review the eligibility of the loans approved with the RMF support and to verify the financial statements of the RMF funds. In establishing the committee clear terms of reference and responsibilities will be defined for all members. Furthermore, as agreed earlier, a joint evaluation by ProPESCA and GAPI of the RMF operations will be conducted in July-September 2013. Based on the outcome of this evaluation, the future of the RMF will be decided on, including the use of the USD 600,000 allocated for the purpose in the ProPESCA budget.

35. Finally, the Developing Financial Services component includes two matching grant operations: the Innovation and Infant Industry grants and the matching grants for women's economic activities. Both of these matching grant operations are only vaguely defined in the Design Document, concerning their purpose, eligibility criteria and actual operational procedures. In the view of the Mission, their utilisation should be limited to three types of projects: (i) operations that can be used for wider demonstration purposes, (ii) operations by clearly unprivileged groups or individuals or people serving these unprivileged groups, and (iii) key value chain operations in which the lack of availability of finance can be clearly demonstrated. It was agreed that the RFS and the Value Chain Specialist design a draft proposal on how the two matching grant schemes would operate, with detailed eligibility criteria and other terms. Concerning the processing of such potential matching grants, the provincial IDPPE would be the appropriate body to process and approve the grants, operating within the guidance of clear scheme rules and under the supervision of the management of ProPESCA/IDPPE.

Table 3

Agreed action	Responsibility	Agreed date
11. Conduct mapping of ASCA promoters in all provinces	RFS	Mid-Nov 2012
12. Launch bids for ASCA promotion	PCU, RFS	By March 2013
13. Train ASCA promoters where needed	RFS, Level 1 promoters	Jan-June 2013
14. Design TORs, recruit s-t TA for ASCA+	RFS, PCU	By March 2013
15. Define ProPESCA approach for advanced ASCA promotion	S-t TA, RFS, PCU	By June 2013
16. Design and implement BDS approach for ProPESCA	RFS, Value Chain Expert, PCU	Design by June 2013, then continuous
17. Decide on ProPESCA approach to attract FIs to Growth Poles	RFS, PCU	March 2013, then continuous
18. Finalise Regulation on the RMF, activate Management Committee	GAPI/PCU/RFS	By Oct 2012, then continuous
19. Organise provincial RMF promotion meetings	GAPI/IDPPE	Oct-Dec 2012
20. Organise evaluation of the RMF	GAPI/PCU, external consultant	July-Sept 2013
21. Design rules for two matching grant operations, implement schemes	RFS, Value Chain Expert, PCU	Rules by March 2013, then continuous

Component 4 – Institutional Strengthening, Policy Initiatives and Project Management (USD 11.8 million)

36. Two key agreements have been established under this component. These are with IIP (fish resource assessment) and ADNAP (co-management) - expected shortly.

37. The MOU with IIP has been signed and a planning exercise carried that has identified five key areas for assessment of fisheries resources for 2013. These are small pelagic fish, large pelagic fish, squid and octopus, demersal fish, bivalves and jelly fish. The initial work-plan will carry out a resource assessment of primarily small pelagics in the 5 – 50 metre depth zone. This zone has previously not been surveyed. This survey is expected to provide a good indication of the potential sustainable resource available for small fishers. It will be necessary to provide for a follow-up in about five years' time. Action needs to be taken (amendment of the ProPESCA AWPB and procurement of necessary research equipment) during 2012 to ensure that the survey can be initiated in good time, early in 2013. Detailed terms of reference, work-plans, procurement plans, training assessment and identification of, if needed, TA capacity (planning, equipment operation and scientific peer review of the results) is underway for all five priority areas. Once complete these protocols will be reviewed with the PCU with the view to making adequate provision in the 2013 AWPB.

38. The MOU with ADNAP is expected to be ready for signature by the end of September. Based on the already completed planning exercise and the project's financial resources ADNAP will strengthen its capacity to develop and lead co-management of fishery operations and surveillance especially at the community level through the CCPs. There are some policy issues with regard to the financial sustainability of these groups that needs to be addressed – these relate to the retention of a share of the registration fees for fishers and fishing equipment.

39. The PCU has remained handicapped by the slow recruitment of the key technical assistance specialists. These specialists have now started taking up their appointments with the value chain, targeting and gender and engineering specialists all on post. The fisheries and rural finance specialists are scheduled to arrive in mid-October.

40. There is a consistent need for ProPESCA to advocate for recognition of a business approach to be developed by small fishers and for the stakeholders at all levels to recognise the importance of timely and competent support by the administrators of the fishing industry to that end.

Table 4

Agreed action	Responsibility	Agreed date
22. Submit revised AWPB needs for survey readiness	IIP	30/9/2012
23. Finalise ADNAP MOU	ADNAP/PCU	30/9/2012
24. Mobilise remaining TA	IDPPE	Asap

CHAPANI grant

41. The Coastal HIV/Aids Prevention and Nutrition Improvement Project – CHAPANI - is a EUR 500,000, three year Grant covering six growth poles of Angoche, Memba, Larde, Moma, Nacala Porto and Ilha de Mocambique – the ProPESCA areas in the province of Nampula. Its development objective is to reduce HIV/AIDS prevalence and malnutrition by mobilising people in the fishing communities to: (i) increase their knowledge and change risky sexual behaviour and (ii) diversify their regular diet. CHAPANI will target three categories of stakeholders in the fishing communities: (i) fishers (ii) processors/traders; and, (iii) providers of support services. Special attention will be given to reach out to women within the target group among the fishermen families. CHAPANI became effective in July 2012.

42. Key activities of ADPP currently consist of demonstrations on measures to reduce risky sexual behaviour and changing attitudes among people living in fishing communities. The Mission was able to meet the ADPP team in Monapo District. It was impressed with the awareness of that team of its responsibilities under the grant and for its well-structured and organised approach to its field programme and associated reporting obligations.

43. At the ADPP HQ the Mission reviewed the overall readiness of the assigned NGO. Following the field visits to three of the six GP to benefit from CHAPANI, and also from discussions with ADPP staff, the mission is pleased to confirm the relevance of the currently proposed activities in the nutrition component aiming to facilitate the sustainable reduction of malnutrition in the fishing communities. It was also agreed that CHAPANI activities will be carried out in coordination with the Health authorities, local authorities and with other NGOs promoting similar initiatives in the field. ADPP participated in the Angoche GP planning exercise and is expected to participate in the GP planning exercises in those areas it will operate in.

Table 5

Agreed action	Responsibility	Agreed date
25. Carry out the baseline survey	ADPP	31 Jan 2013
26. Establish demonstration programme for hygienic food preservation	ADPP	31 Jan2013
27. Establish demonstration programme for hygienic food preparation for children	ADPP	31 Jan2013

D. Project Implementation Performance

44. **Project management performance.** ProPESCA is a well led and well managed project. The extensive delays that have slowed progress during 2012 are substantially due to the slow introduction and operationalization of the e-SISTAFE system (see Fiduciary section.) The system is now operative and as a consequence good progress has been achieved in several areas.

45. Particularly notable has been the testing and application of the growth pole (GP) planning system with three GPs, Moma, Angoche and Larde completed. The plans include assessment of the fisheries sector, SWOT analysis, mapping of the pertinent value chains and the GP Action plan. The approach developed earlier in the year has been found to be valid. A further 19 GP plans will be carried out in October and November. There will be three teams operating in the north, centre and south with the project manager overseeing all three zones on a roving basis. As the results of these 19 GP plans will not be available until early 2013 it will be necessary to anticipate significant AWPB

revisions during 2013. There are sufficient resources in the current 2012 AWPB to carry out all the planned GP exercises on schedule.

46. Unfortunately the PIM has not been finalised as the financial guidelines section has not been drafted – this should be done as a matter of urgency now that the e-SISTAFE system is operative.

47. The **2012 AWPB** was amended in July 2012 with this being facilitated by the prompt review and provision of the necessary “no objection” by IFAD within one week. The current utilisation of the 2012 AWPB is summarised in Table 6. The 2013 draft AWPB will be submitted on schedule by 15 November, 2012.

48. **Monitoring and evaluation.** The MIS system, based on the successful one used for PPABAS, is fully developed and operational. Key training was provided by the consultant in March 2012 and this has been followed up by the PCU with two representatives from each delegation having been trained in September 2012. The main issue now is for the procurement of the M & E computers (being done with the e-SISTAFE computers) to be completed. Once they have been delivered it will be possible for the full one week training programme (to be done at each delegation) to be carried out. This will be done immediately after the completion of the 2012 Growth pole planning exercises. So it is expected that the training will be carried out between December 2012 and February 2013. The M&E leaders in each delegation responded positively to their initial round of training (Beira, September 2012) in that they found the system relevant and appreciated that it has been built on the earlier system that they are familiar with.

49. There are two areas where action needs to be taken. Firstly the recruitment of the consultant to help develop the base-line survey and who will be responsible for the data analysis. The actual survey will be carried out by IDPPE staff in each delegation and will, be initiated as part of the M&E training – as such it is expected to have the data analysis completed in February 2013. The second item is the recruitment of the M&E Assistant. This has been recognised as being important and needs to be actioned.

50. **Knowledge management.** Innovations arising from PPABAS that should be replicated to include the empowerment of fishers and their communities in managing their fisheries resources, accessing markets, organising saving and credit groups to plan and manage their activities themselves, as well as the promotion of market linkages through the provision of economic infrastructure.

51. The market operating model has been found to encounter difficulties due to the economic management structure, which allows only for a minimal part of revenue generated by the market to be used for operation and maintenance. This provides scope for introducing a change in approach where economic management is more directly influenced by the users’ committee in ways that will directly impact operation and management of the market.

Table 6

Agreed action	Responsibility	Agreed date
28. Complete GP plans	PCU	30/11/12
29. Finalise PIM	PCU	15/10/2012
30. Revise 2012 AWPB	PCU/IFAD	15/10/2012
31. Submit 2013 AWPB	PCU	15/11/2012
32. Initiate full M & E training	PCU	1/12/2012
33. Recruit baseline survey consultant	IDPPE	25/10/2012
34. Recruit M & E Assistant	IDPPE	30/11/2012

E. Fiduciary Aspects

ProPESCA (IFAD 822-MZ)

52. **Funds utilization.** To date, disbursements to ProPESCA have amounted to about USD 2 million, composed off start-up costs and the designated account initial allocation. Due in part to the slow implementation of the new Funds Flow system, IFAD loan utilization has only amounted

to USD 464,466, and it is the project only source of disbursements so far. The MoF confirmed that it will meet the counterpart funding requirements of the Project including the additional funds being mobilised from the EU under its MDG grant programme for Mozambique. The PCU reported that despite repeated follow-up over the past three months OFID has still not confirmed its disbursement procedures.

53. **Financial Management and Funds Flow.** The financial management and funds flow of ProPESCA is closely linked to Mozambique's Government financial management system e-SISTAFE. It was approved in 2002 and implementation started in 2004. The system is mostly operational except for some specific and regional difficulties. It is the first time that an IFAD supported project in Mozambique will rely essentially on country systems for its financial management and funds flow, and it is a precedent for IFAD future projects in Mozambique.

54. ProPESCA e-SISTAFE implementation included discussions organized at IFAD's February and October 2011 missions, and the following implementation. The timing since start-up included 6 months for setting the budget and related accounts, 1 month for training, and the purchase and installation of equipment, and start of processing, occurred 10 months from the initial date. Although these timings can be improved, it is a useful learning process for other IFAD projects using these country systems in Mozambique, such as PROSUL.

55. As part of that learning, it can be mentioned that although e-SISTAFE generates some useful reports these can be further improved by the e-SISTAFE team. ProPESCA still prepares some excel based accounting and financial schedules, which are used as backup and reporting instruments.

56. **Review of e-SISTAFE supporting documentation.** Having started recently, ProPESCA only had initial disbursement requests, so the new disbursement documentation used for e-SISTAFE was reviewed instead. It included a detailed request, a listing of funds transferred into the single treasury account (CUT), the e-SISTAFE generated payment report and its Excel based backup. Although still evolving, the disbursement process was well planned and had adequate controls.

57. **Recruitment of ProPESCA Auditors.** The ToR for the external auditors have been prepared and will be advertised in September 2012.

58. **Procurement Matters.** The procurement plan was also updated recently and sample files reviewed followed proper procedures, such as complete tendering or direct negotiations, as appropriate to each situation. Detailed comments to the plan mentioned that the hiring of the ProPESCA UCP's team staff has been completed, as well as the TA staff, except for one final official authorization for the financial area. Other specialists have already received full authorizations and started their activities.

59. The tenders for the equipment included in the procurement plan, including e-SISTAFE equipment for some regional offices, have been started, and the completion of the proposals evaluation is expected soon. Some civil works await the finalization of their tender documents and are to be issued soon.

60. The contract and assets registers were examined and found updated to 28 August 2012. A sample contract was verified and found acceptable, with all the necessary tender documentation and authorization procedures.

CHAPANI grant (Coastal HIV/AIDS Prevention and Nutrition – BSF-BG-48-MZ)

61. **Funds utilization.** The CHAPANI grant became effective in May 2012 and has then received a USD 250 000 disbursement due upon signature of the agreement. Further disbursements require justification of 80% of that amount.

62. **Financial Management and Funds Flow.** The CHAPANI grant implementation will be closely coordinated with IDPPE, the implementing agency for ProPESCA, but it will not use e-SISTAFE procedures.

PPABAS (Sofala Bank, IFAD 566-MZ)

63. **Funds utilization.** PPABAS funds utilization ended in early 2012 at 96 %. Disbursements by components and categories were reported by the February 2012 supervision mission. Taking into account the below mentioned Government reimbursement, an amount of approximately USD 1 million or 5 % of the total IFAD PPABAS loan will be cancelled.

64. **Closing of project and loan accounts.** An amount of USD 141,693 is still outstanding in the project accounts, to be refunded by Government as part of its VAT tax counterpart funding. Although this amount is to be paid over six months, in the second semester of 2012 and early 2013, if the payment is not made it is a reason for suspending IFAD project disbursements in Mozambique. At a meeting with Government these issues were clarified and a reimbursement is expected in two tranches, USD 65,000 by 15 November 2012 with the balance to be settled in the first quarter of 2013.

65. **Audits for January 2011 to May 2012.** IFAD's previous audit issues, undocumented expenses from 2009 and previous years have been resolved. The current report is qualified only due to the need for the Government to reimburse the amount of USD 141,693 for the VAT tax that was not eligible expenditure.

66. The BSF Grant BG-36-MZ includes a qualification due to the lack of valid explanation or documentation for a USD 696 closing balance amount. The PCU will resolve this issue by the end of 2012.

67. **Ex-post review of supporting documentation.** The only disbursement request sent after the last supervision mission, for a full amount recovery was WA 141, and it was reviewed and found well prepared and acceptable.

Table 7

Agreed action	Responsibility	Agreed date
35. Document lessons learnt for setting up e-SISTAFE	IFAD CO	31 Dec 2012
36. Ensure adequate counterpart funds are made available	MoF	On-going
37. Resolve outstanding balance for PPABAS	MoF	Urgent
38. Up-grade the e-SISTAFE report formats	PCU/e-SISTAFE team	31 Dec 2012
39. Resolve balance of BSF Grant	MOF	Urgent
40. Appoint ProPESCA auditors	PCU/IDPPE	31 Dec 2012

F. Conclusion

68. Whilst ProPESCA is well placed to commence full implementation it will be necessary for the leadership of IDPPE and the provincial authorities to ensure timely and effective decisions and actions. A follow-Up mission is scheduled for February 2013 and a full Implementation Support and Supervision Mission will be fielded in September 2013.

Claus Reiner
Country Programme Manager
IFAD

14 September 2012
Date

Rosita Gomes
Deputy Director
IDPPE

14 September 2012
Date

Annex 1: Agreed Actions September 2012

Section 1: ProPESCA

AGREED ACTIONS 3rd Mission Feb 2012	STATUS OF ACTIONS Feb 2012 (with Mission Comments)	AGREED ACTIONS of 4th Mission Sept 2012 (with Responsibility and Deadlines)
Comp.1 Supporting Development of Higher Value Fish		
7. Complete works on market facilities developed under PPABAS and ProPAPA (30/8/2012 by IDPPE district teams)	Not done, funds not available. Survey of the work required and preliminary budget done. A mission has been planned to assist preparation of tender documents. (Mission remains concerned about operating model for markets)	7. Complete works on market facilities developed under PPABAS and ProPAPA (IDPPE and district teams, 31 Oct 2012) and
8. Document results and lessons of fishery extension technology packages and use to prepare extension messages (31/10/2012 by IDPPE HQ technical staff and PCU)	Not yet done. Delay in recruiting fishing technologist and value chain expert	8a. Document results and lessons of fishery extension technology packages and use to prepare extension messages. 8b. Develop a standardised approach to assessing fishing methods options (fishing technologist and value chain specialist, 30 Nov 2012)
		24. Complete review of market operating models and development of alternative ones (PCU, 31 Oct. 12)
Comp. 2 Improving Economic Infrastructure		
9. Establish MoUs with ANE, EDM & FUNAE (30/5/2012 by PCU & agencies, IFAD “NO” required)	MoUs prepared and shared with implementing agencies. MoU with FUNAE sent for countersignature. Comments received from ANE, awaiting reaction from FE and EDM	OK
10. Up-date unit costs for roads and electricity grid (15/3/2012 by responsible agency)	Done, with assistance of a Senior Planning Engineer	OK
11. Recruit infrastructure engineer (15/3/2012 by IFAD, ToR by PCU)	Done. Report on implementation approach of component 2 prepared.	OK
		25. Adopt selection criteria for Economic infrastructure projects (PCU Engineer, 15 Dec 2012)
		26. Recruit Road Design Engineer (ANE, 31 Jan 2013)
		27. Strengthen Roads O & M capacity (PCU & ANE, on-going)
		28. Investigate supplementary funding for electrification (IDPPE, 31 Mar 13)
		29. Finalise Alternative Energy pilot scheme (Mission and PCU Engineer, 30 Sep. 2012)
Comp. 3 Developing Financial Services		
12. Tender for PCR Level 1 Promoters (30/3/2012 by PCU/PCR Specialist)	Not yet done. Pending recruitment of Rural Finance specialist (contract to be endorsed by TA)	12a. Map PCR promoters, 12b. Recruit & train PCR promoters (PCU/RFS, March 2013)
13. Start Level 3 PCR Promotor Training (PCR Specialist & PCU by 10/07/2012)	As above	13. Start Level-3 PCR Promotor Training (PCU, 30 Nov 2012)

14. Develop advanced PCR model (PCR Specialist with assistance of PCR Level 1 Promoters by 30/8/2012)	As above	14. Develop advanced PCR model (short-term TA/RFS, June 2013)
15. Carry out independent review of the Risk Mitigation Schemes managed by GAPI (PCU by 30/9/2012) Not yet done.	Follow-up of GAPI direct lending operations in Sofala and Zambézia (8 loans, MZM 880,000) using the RMF. Evidences that loans were serviced through a co-financing mechanism required.	15. Carry out independent review of the Risk Mitigation Scheme managed by GAPI (GAPI/PCU/external consultant, July to September 2013)
		30. Decide on ProPESCA approach to attract financial institutions to GPs (PCU/RFS, 31 March 2013)
		31a. Finalise RMF regulations and 31b. Activate management committee (GAPI, PCU/RFS, 31 Oct 2012)
		32. Organise provincial RMF promotion meetings (GAPI/IDPPE, 31 Dec 2012)
		33. Design rules for the two matching grant operations (RFS & Value Chain Specialist, 31 Mar 2013)
		34. Recruit short-term TA for PCR+ (RFS, PCU, 31 Mar 13)
		35. Define ProPESCA approach for advanced PCR Promoters (short-term TA, RFS, PCU, 30 Jun 13)
		36. Design and implement BDS approach for ProPESCA (RFS, VCS, PCU, 30 Jun 13)
Comp 4 Institutional Strengthening, Policy and Project Management		
16. Finalise MoUs with ADNAP & IIP (PCU by 31/3/2012)	Done. MoUs drafted and were shared with the agencies. Signed MoU with IIP and awaiting reaction from ADNAP.	OK
17. Recruiting and training the technical officers and inspectors along with co-management committees (ADNAP/IDPPE by 30/9/2012)	Not yet done due to delays in putting in place e-SISTAFE. Planning meeting to guide implementation of co-management activities held in August.	17. Recruit and train the technical officers and inspectors along with co-management committees (by ADNAP & IDPPE, 31 March 2013)
18. Up-to-date information on the fish resources at each growth pole to be compiled and provided as resource material (IIP prior to each GP Planning session). Partially done.	Information on catches and species composition grouped by districts already available. Catch trends (catch per unit of effort) analyzed during planning exercises at growth pole level. Planning meeting will guide implementation of surveys of fishery resources held in July	OK
19 Establish provincial sub-groups of the Project Reference Group. (PCU in line with GP planning process)	Partially done. Members of PRG to attend GP consultation workshops.	OK – need to follow-up to make sure the provincial sub-groups of the Project Reference Group are operating effectively (PCU)
1. Phase 2 of M & E System and Manual (30/1/12 by consultant and PCU)	Done. The exercise was completed in April 2012. The consultant conducted a training session as a part of the finalization of the system, including database setting and management	OK

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2. Draft AWPB (after revision) to be sent to IFAD and "NO" provided (15/11/11 by PCU, response within 5 days)	First update of AWPB made in July 2012. NO OBJECTION from IFAD received.	OK
3b Mobilization (1/2/12 by PCU and TA staff)	Two TA contracts approved in August. Remaining three pending approval by the Administrative Court. <i>(All expected to be mobilised by 15 October 2012)</i>	OK
20. Finalise preparations and schedule for GP Planning process (PCU with support from the Mission by 29/2/2012)	Done. Guidelines for planning at growth pole prepared. Exercises undertaken so far in three GPs (Moma, Larde, Angoche) and the related action plans drafted. Planned to cover 2/3 of GPs before end of year	OK
		39a. Initiate full M&E training (PCU, 1 Dec 12) 39b. Recruit baseline consultant (IDPPE 25 Oct 12) 39c. Recruit M&E Assistant (PCU & IDPPE, 30 Nov 2012)
Fiduciary Matters		
5. PIM review (30/4/12 by PCU)	Drafting of PIM underway. PIM being drafted by PCU team instead of consultant.	5. Finalise PIM review (PCU, 15 Oct 2012)
6. Financial Management, e-sistafe, Tompro i) Cap. building (30/11/11 PCU) ii) Forecasts (30/11/11 by PCU) iii) WA 2 (10/12/11 by Fin Mgr)	PCU staff has attended training earlier, but e-SISTAFE system only became operational in July 2012. Computers with required specifications have been bought. Procurement of equipment for IDPPE provincial offices underway	6a. Document e-SISTAFE process (IFAD Country Office, 31 Dec 2012) 6b. Upgrade e-SISTAFE Reports (PCU, 31 Dec 2012)
7. Financial Management Manual – review (15/3/12 by PCU)	15/3/12 Drafting of manual underway. Drafting of manual delayed due the need to see more progress on establishing e-Sistafe.	OK. See 5 above
21. PCU finance team take a 2-day training by on IPSAS and related SOPs (contracted accounting firm by 30/4/2012)	Not yet done. Priority assigned to putting to work e-Sistafe. Planned to take place in October	21. Take a 2-day training by on IPSAS and related SOPs by a contracted accounting firm (PCU finance team, 31 Oct. 2012)
22. Establish the seven provincial ProPESCA accounts (Finance Manager by 13/3/2012)	Done. All the IDPPE delegations have bank accounts	OK
		40. Ensure adequate counterpart funding for 2013 (MoF, IDPPE, 31 Dec 2012)
		41. Appoint ProPESCA Auditors (PCU/IDPPE, 31 Dec 12)
		42. Resolve outstanding balance for PPABAS (MoF, urgent)
		43. Resolve balance of BSF Grant (MoF, urgent)

Section 2: CHAPANI

AGREED ACTIONS 3rd Mission Feb 2012	STATUS OF ACTIONS Feb 2012 (with Mission Comments)	AGREED ACTIONS of 4rd Mission Sept 2012 (with Responsibility and Deadlines)
		1. Complete baseline survey report (ADPP, 31 Jan 2013)
		2. Commence demonstration programme for hygienic food preservation (ADPP, 31 Jan 2013)
		3. Commence demonstration programme for hygienic food preparation for children (ADPP, 31 Jan 2013)

Annex 2: Compliance with Key Covenants of the ProPESCA Financing Agreement

Section		Target/Action Due Date	Compliance Status/Date	Remarks
Section B.7	The Borrower shall provide Counterpart funding of about USD 1.1 million to finance additional extensionists and cost-sharing of alternative power supply systems.	End of project	On track	However, USD 141,693 is still outstanding for PPABAS, to be refunded by Government as part of its VAT tax counterpart funding
Section E.1	Project Coordinator and Finance Manager shall not be removed without IFAD no-objection	On-going	Complied	
Section 3.a.	The agreements between IDPPE and FE,ANE, EMD, FUNAE, FARE & for the RMF are approved by IFAD	Prior to relevant disbursement	Complied	
Schedule 1.1.1	The target population will be located in the selected growth poles along the whole coastline of Mozambique	On-going	Complied	All GPs are in coastal zone
Schedule 1 II.5 & 6	Project Reference Groups (PRGs) at national and local established and will meet at least semi-annually to facilitate coordination among key Project parties and stakeholders and their participation in the planning, monitoring and implementation of the Project.	On-going	On track as part of the GP planning process	The local PRGs are to be set up at provincial level
Schedule 3, 1.	IDPPE will recruit at least one additional extensionist in each GP	As per GP programme	NYA	
Schedule 3, 2.	Appropriate insurance will be taken out for PCU staff	On-going	Complied	
Schedule 3, 3.	Appropriate maintenance will be carried out for all market infrastructure supported under the project	On-Going	In progress	Attention urgently required. The PCU is currently developing alternative models for market management.
Schedule 3, 4.	Establishment and operation of a PM & E system	30 March 2012 (12 months from entry into force)	Complied	
Schedule 3.5	The Project Implementation Manual (PIM) will be established and used to guide project operations, following IFAD no-objection	30 March 2012 (12 months from entry into force)	Not yet complied	Delayed due to e-SISTAFE set-up. The Financial Management Manual can now be completed as ProPESCA account in e-SISTAFE operative.

Annex 3: ProPESCA Financial Status

Table 1: ProPESCA 2012 AWB (Revised July) Expenditure by Component, as of 31 August 2012 in '000 MZM

Components	IFAD			OFID		EU			GoM		Mgr RMF		Fls		Pte Investor		Total				
	Budget	Budget	Actual	Budget	Actual	Budget	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Budget	Actual	%	
	Initial	Revised		Initial		Initial	Revised		Initial		Initial		Initial		Initial		Initial	Revised		Initial	Revised
1. Supporting Dev. of Higher Value Fish	18 041.3	25 238.9	28.6	-	-		5 684.0	-	-	-	-	-	-	-	-	-	18 041.3	30 922.9	28.6	0.2	0.09
2. Improving Economic Infrastructures	-	-	-	6 244.0	-		3 220.0	-	-	-	-	-	-	-	-	-	6 244.0	9 464.0	-	-	-
3. Financial Services	17 327.9	17 956.4	-	-	-		-	-	-	-	-	-	-	-	-	-	17 327.9	17 956.4	-	-	-
4. Inst. Strengthening, Policy & Project Mgt	43 842.2	47 588.4	10 025.9	-	-		-	-	1 985.2	-	-	-	-	-	-	-	45 827.4	49 573.6	10 025.9	21.9	20.22
Total	79 211.4	90 783.6	10 054.5	6 244.0	-		8 904.0	-	1 985.2	-	-	-	-	-	-	-	87 440.6	107 916.8	10 054.5	11.5	9.32

Table 2: ProPESCA 2012 AWB (Revised July) Expenditure by Category, as of 31 August 2012 in '000 MZM

Categories	IFAD			OFID		EU			GoM		Mgr RMF		Fls		Pte Investor		Total				
	Budget	Budget	Actual	Budget	Actual	Budget	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Budget	Actual	%	
	Initial	Revised		Initial		Initial	Revised		Initial		Initial		Initial		Initial		Initial	Revised		Initial	Revised
1. Civil Works	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Vehicles, Equipment and Materials	6 133.5	6 356.0	180.5	-	-		-	-	-	-	-	-	-	-	-	-	6 133.5	6 356.0	180.5	2.9	2.84
3. TA, Contracts, Studies, Training & Workshops	22 445.5	25 415.6	3 374.0	2 240.0	-		294.0	-	-	-	-	-	-	-	-	-	24 685.5	27 949.6	3 374.0	13.7	12.07
4. Value Chain Facility	14 226.0	21 285.3	-	996.8	-		2 800.0	-	-	-	-	-	-	-	-	-	15 222.8	25 082.1	-	-	-
5. IOF Matching Grants	11 375.4	11 788.0	-	-	-		5 810.0	-	-	-	-	-	-	-	-	-	11 375.4	17 598.0	-	-	-
6. Investment Capital	3 358.6	3 480.4	-	3 007.2	-		-	-	-	-	-	-	-	-	-	-	6 365.8	6 487.6	-	-	-
7.1 Salaries and Allowances	15 619.8	16 186.8	6 107.0	-	-		-	-	-	-	-	-	-	-	-	-	15 619.8	16 186.8	6 107.0	39.1	37.73
7.2 Incremental Operating Costs	6 052.5	6 271.6	393.1	-	-		-	-	1 985.2	-	-	-	-	-	-	-	8 037.7	8 256.8	393.1	4.9	4.76
Total	79 211.4	90 783.6	10 054.6	6 244.0	-		8 904.0	-	1 985.2	-	-	-	-	-	-	-	87 440.6	107 916.8	10 054.6	11.5	9.32

Table 3: ProPESCA 2012 AWB (Revised July) Cumulative Expenditure by Component, as of 31 August 2012 in '000 MZM

Components	IFAD			OFID		EU			GoM		Mgr RMF		Fls		Pte Investor		Total				
	Budget	Budget	Actual	Budget	Actual	Budget	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Budget	Actual	%	
	Initial	Revised		Initial		Initial	Revised		Initial		Initial		Initial		Initial		Initial	Revised		Initial	Revised
1. Supporting Dev. of Higher Value Fish	18 041.3	25 238.9	28.6	-	-		5 684.0	-	-	-	-	-	-	-	-	-	18 041.3	30 922.9	28.6	0.2	0.09
2. Improving Economic Infrastructures	-	-	-	6 244.0	-		3 220.0	-	-	-	-	-	-	-	-	-	6 244.0	9 464.0	-	-	-
3. Financial Services	17 327.9	17 956.4	-	-	-		-	-	-	-	-	-	-	-	-	-	17 327.9	17 956.4	-	-	-
4. Inst. Strengthening, Policy & Project Mgt	43 842.2	47 588.4	12 976.4	-	-		-	-	1 985.2	-	-	-	-	-	-	-	45 827.4	49 573.6	12 976.4	28.3	26.18
Total	79 211.4	90 783.6	13 005.0	6 244.0	-		8 904.0	-	1 985.2	-	-	-	-	-	-	-	87 440.6	107 916.8	13 005.0	14.9	12.05

Table 4: ProPESCA 2012 AWB (Revised July) Cumulative Expenditure by Category, as of 31 August 2012 in '000 MZM

Categories	IFAD			OFID		EU			GoM		Mgr RMF		Fls		Pte Investor		Total				
	Budget	Budget	Actual	Budget	Actual	Budget	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Budget	Actual	%	
	Initial	Revised		Initial		Initial	Revised		Initial		Initial		Initial		Initial		Initial	Revised		Initial	Revised
1. Civil Works	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Vehicles, Equipment and Materials	6 133.5	6 356.0	180.5	-	-		-	-	-	-	-	-	-	-	-	-	6 133.5	6 356.0	180.5	2.9	2.84
3. TA, Contracts, Studies, Training & Workshops	22 445.5	25 415.6	6 324.5	2 240.0	-		294.0	-	-	-	-	-	-	-	-	-	24 685.5	27 949.6	6 324.5	25.6	22.63
4. Value Chain Facility	14 226.0	21 285.3	-	996.8	-		2 800.0	-	-	-	-	-	-	-	-	-	15 222.8	25 082.1	-	-	-
5. IOF Matching Grants	11 375.4	11 788.0	-	-	-		5 810.0	-	-	-	-	-	-	-	-	-	11 375.4	17 598.0	-	-	-
6. Investment Capital	3 358.6	3 480.4	-	3 007.2	-		-	-	-	-	-	-	-	-	-	-	6 365.8	6 487.6	-	-	-
7.1 Salaries and Allowances	15 619.8	16 186.8	6 107.0	-	-		-	-	-	-	-	-	-	-	-	-	15 619.8	16 186.8	6 107.0	39.1	37.73
7.2 Incremental Operating Costs	6 052.5	6 271.6	393.1	-	-		-	-	1 985.2	-	-	-	-	-	-	-	8 037.7	8 256.8	393.1	4.9	4.76
Total	79 211.4	90 783.6	13 005.0	6 244.0	-		8 904.0	-	1 985.2	-	-	-	-	-	-	-	87 440.6	107 916.8	13 005.0	14.9	12.05

Annex 4: ProPESCA Physical Progress

Status as at 31 August 2012								
Using the Summary Output Indicators, with some modifications proposed by the IFAD supervision mission (in yellow), Sep 12								
Output Indicators	Unit	Total Project (PDR)			Annual (AWPB)			IFAD Comments
		Target	Actual	%	Target	Actual	%	
Component 1. Supporting Development of Higher Value Fish								
Households receiving project services	no.	13 600						
<i>Output 1. Diversified, commercially viable fishing units</i>								
1.1 People trained in boat building	no.	95						m/f
1.2 Boat drivers trained	no.	210						m/f
1.3 Engine mechanics trained	no.	210						m/f
1.4 Fishers trained in good fish handling practices	Male	2 160						
	Female	140						
1.5 Fishers trained in improved gear and fishing	Male	295						
	Female	20						
1.6 Fishers accessing business development services	Male	2 210						
	Female	90						
1.7 New/existing associations supported	no.	100						
<i>Output 2. Improved Post Harvest skills</i>								
2.1 Traders / processors trained in marketing of fresh/frozen fish	Male	1 300						
(nb marketing includes handling and processing/preservation)	Female	700						
2.2 Traders / processors trained in marketing of traditionally	Male	1 300						
	Female	700						
2.3 Fish fairs held	no.	130						
2.4 Traders / processors accessing business development services	Male	1 800						
	Female	950						
2.5 New / existing trader associations supported	no.	50						
<i>Output 3. Market-related infrastructure (quality & hygiene)</i>								
3.1 Ice plants and freezing / cold storage facilities established	no.	10						
3.1 Ice plants and freezing / cold storage facilities operational	no.	10						
3.2 Entrepreneurs with home freezers for ice production	Male	160						Can we say: <u>additional</u> entrepreneurs with home freezers for
	Female	80						
3.3 Point of fist sale markets established	no.	11						
3.4 Market agents trained	Male	670						
	Female	330						
3.5 Small-scale processing units established	no.	14						
3.6 Motorized transporters for fish / inputs established	Male	122						
	Female	60						
3.7 Urban retail traders established	Male	13						changed to traders, as shops cannot be m/f
	Female	13						
3.8 Urban fish market facilities upgraded	no.	6						
3.8 Urban fish market facilities upgraded and functioning	no.	6						

Component 2. Economic Infrastructure								
Households benefitting from roads and electrification	no.	40 000						
<i>Output 3. Market-related infrastructure</i>								
3.9 Electricity lines extended within growth poles	km	160						
3.10 Electricity connections made	no.	no target						
3.11 Alternative power sources established	no.	7						
<i>Output 4. Improved access between fishing centres, markets and the national roads network</i>								
4.1 Local contractors trained	no.	50						m/f
4.2 Classified roads improved to all season standard [1]	km	250						
4.3 Unclassified roads improved to all season standard	km	250						
4.4 People benefitting from labour-based road works employment	Male	6 000						
	Female	2 000						
4.5 District staff trained in road maintenance aspects	no.	34						m/f
4.6 Roads maintained to all season access	km-years	2 500						Modified the unit as this will this be collected annually.
Component 3. Developing Financial Services								
Households receiving project services	no.	35 200						shouldn't this be at the very top of the table?
<i>Output 5. Community-based financial institutions with increased capacity for savings mobilization and lending</i>								
5.1 Staff of PCR promoters trained	Male	50						
	Female	50						
5.2 Savings and Credit Groups supported [2]	no.	1 600						we also need graduated groups, and graduated groups still
graduated groups	no.	no target						
graduated groups still active	no.	no target						
5.3 Number of active savers	Male	18 000						Recalculated as per ProPESCA Output Indicators – Revised
	Female	14 000						As above.
5.4 Number of active borrowers	Male	9 000						As above. (borrowers=active borrowers)
	Female	7 000						As above.
5.5 Value of annual savings	USD	1 300 310						As per ProPESCA Output Indicators – Revised, these are
5.6 Value of annual loans	USD	2 600 619						As above.
5.7 People trained in functional adult literacy	Male	1 700						
	Female	2 700						
5.8 People trained in business planning and development	Male	8 000						
	Female	8 000						
5.9 Formal CBFS providers supported	no.	11						
5.10 Value of matching grants to formal CBFS providers	USD	750 000						
5.11 Members of formal CBFS providers	Male	2 000						members? Not clear.
	Female	1 000						

<i>Output 6. Private financial institutions financing fisheries</i>								
6.1 Enterprises accessing matching grants / RMF loans	no.	220						
6.2 Value of matching grants disbursed	USD	3 500 000						How to deal with the numbering - 6.2a?
6.2 Value of RMF loans disbursed	USD							
6.3 New outlets of formal financial institutions	no.	26						
6.4 Value of matching grants for formal financial institutions	USD	800 000						6.4 is part of 6.2
6.5 Staff of formal financial institutions trained	Male	70						
	Female	34						
6.6 PCR members accessing enterprise development loans from	Male	1 050						
	Female	450						
6.7 Enterprises accessing pilot investment support grants	no.							
6.8 Value of pilot investment support grants	USD	300 000						
6.9 Women entrepreneurs accessing micro-enterprise grants	Female	1 000						
6.10 Value of women micro-enterprise grants	USD	300 000						
Component 4. Institutional Strengthening, Policy Initiatives and Project Management								
<i>Output 7. Increased institutional capacity</i>								
7.1 Growth pole extensionists, equipped/operational	no.	104						m/f
7.2 District with fisheries administration established	no.	23						
7.3 Growth pole resource potential assessment reports prepared	no.	26						
7.4 Provincial and district staff trained	no.							m/f
<i>Output 8. Improved policy/legislative framework supportive of artisanal fisheries</i>								
8.1 Management policies, regulations and legislation introduced	no.							
<i>Output 9. Effective project management systems</i>								
9.1 Growth pole investment plans prepared	no.	26	3	12%	???	3		
9.2 Study, survey and strategy reports produced	no.	20						
9.4 Planning and review workshops /seminars conducted	no.	140						
9.5 Knowledge management and advocacy products created	no.	10						

Annex 5: ProPESCA No-objection Tracking Sheet

Overall 8.4 working days average turn-around time					9.5					2.0
STAGE ONE (Review of Bidding Documents)						STAGE TWO (Review of Evaluation Reports)				
Description of Goods/ Works or Services	DATE OF FIRST RECEPTION	DATE OF COMPLETE RECEPTION	Date No-Objection Provided By CPM	REMARKS	WORKING DAYS in ESA	DATE OF FIRST RECEPTION	DATE OF COMPLETE RECEPTION	Date No-Objection Provided by CPM	REMARKS	WORKING DAYS in ESA
NO 001 - AWPB 2012	05-Dec-11		09-Jan-12		22					n/a
NO 002 5 TA positions & PKM Assistant	08-Nov-11		23-Nov-11		11	07-Mar-12		11-Mar-12		2
NO 003 Procurement of Equipment	17-May-12		04-Jun-12		12					n/a
NO 004 MoUs between IDPPE-IIP & FUNAE	04-Jun-12			denied 08-Jun-12	n/a					n/a
NO 004b MoUs IDPPE-IIP & FUNAE	12-Jul-12		23-Jul-12		7					n/a
NO 005 revised AWPB 2012	16-Aug-12	22-Aug-12	23-Aug-12		1					n/a
006 MoUs between IDPPE, ANE & Road Fund	13-Sep-12		19-Sep-12		4					n/a

Annex 6: Key Persons Met

Name	Organization
Maputo	
HE Victor Borges	Minister of Fisheries
Tome Capece	Director, IDPPE
Simeao Lopes	Director, ADNAP
Rosita Gomes	Deputy Director, IDPPE
Atanasio Brito	Deputy Director, IIP
Maria Ascensao	Deputy Director, ADNAP
Angelica Dengo	Min of Fisheries
Paulo Muchave	IDPPE/ProPESCA
Ernesto Poiosse	IDPPE/DDS
Acacio Alexandre	IDPPE/ProPESCA
Amos Chamussa	IDPPE/DPC
Luis Silva	IDPPE/ProPESCA
Luisa Artur	IDPPE/ProPESCA
Gloria Nhamuzuwe	IDPPE
Isabel Chauca	IIP
Osvaldo Ernesto	IIP
Avelino Machava	ANE
Helen Hallstrom	ADPP Mozambique
Antonio Junior	EDM/DEP
Carlos Calenger	INAQUA
Antonio Souto	GAPI
Aurora Malene	GAPI
Victor Ribeiro	GAPI
Nelsa Muapeite	FUNAE
Edson Uamusse	FUNAE
Fatima Gimo	MoF/DNT
Domingos Joao	BoM
Adamo Beni	BoM
Sandra Vaz	CEDSIF
Nampula	
Daniel Amade	DPP/Nampula
Gilberta Banze	CMCN
Raki Papuseco	CMCN
Luis Pereira	CMCN
Management Committee	Fish market, Belenensis
Isidro Intave	
Moma	
Araujo Momade	District Administrator, Moma
LEEMAR	Moma
Mussa Ibraimo	Extensionist, Moma
Management Committee	Market of first sale, Moma
Alexandre Sumbana	ASS Microcredito, Moma
Mussa Idrissa	Boat owner – Senegalese Pirogue/Moma
Angoche	
Americo Adamugi	President of the Municipal Council/Angoche
APAA	Angoche
CCP	Angoche
Management Committee	Market of first sale, Sangage
Monapo	
Mariano Pita	ADPP/CHAPANI Extensionists, Monapo
Selemene Abacar	ADPP/CHAPANI Extensionists, Monapo
Charamadane Nuro	ADPP/CHAPANI Extensionists, Monapo
Francelino Augusto	ADPP/CHAPANI Extensionists, Monapo

Appendix 1: Fisheries Development

Introduction

1. The fisheries development component of ProPESCA builds on the two previous IFAD-supported fisheries projects in Mozambique, all aiming to support the development of the artisanal fisheries subsector. This is being done by supporting the development of value chains for high value fish, which is meant to benefit those working with artisanal fishing, processing and trade of fresh and traditionally processed fish, or provision of inputs and services. They are expected to benefit through a higher level of economic activity and increased margins.
2. Key aspects to achieve this are:
 - i. improving the artisanal fishers' ability to catch and preserve more high value fish; and
 - ii. selling the fish, both fresh and processed, through “points of first sale” and retail markets that meet adequate standards of hygiene and collect higher prices to the fishers.
3. The mission addressed two key aspects – Fisheries capture and marketing. Its main foci were:
 - i. assessing the promotional activities to artisanal naval carpentry done during the PPABAS project and the plans for disseminating knowledge and demand for larger boats;
 - ii. reviewing the PPABAS diagnosis of fishing associations;
 - iii. assessing the conclusion of “points of first-sale” and expansion of municipal markets; and
 - iv. reviewing the demand on the Mozambican fisheries policies emerging from the growth pole planning exercises, and suggest ways for ProPESCA to support the policy changes that would be required.

Promotional activities

4. During PPABAS, activities were carried out to improve knowledge and diversification from research and innovations in artisanal fishing techniques through wide-ranging experiments, training sessions and demonstrations in 109 fishing centers as well as exchange visits. Training of artisanal naval carpenters was done to teach them how to build larger boats that can be used at open sea. One boat model that was promoted was the Senegalese pirogue, which is known for being a large, sturdy sea-faring boat. To promote this boat, a Senegalese boat builder was invited to Mozambique to teach local naval carpenters how to build one. Following this, PPABAS had 5 more pirogues built and given to fishers identified by IDPPE along the Sofala bank. In addition the fishers were sent to Senegal to learn how to operate the boats and subsequently use them for their fishing operations to demonstrate the benefits of the larger boat to other fishers. The demonstration of the pirogue is said to have made other fishers interested although no data has been collected to verify this. The forthcoming review of the extension and promotion activities done during PPABAS and ProPAPA should include a review of the influence the demonstration boats have had on the fishers’ decision to invest in larger boats.
5. In order to promote investments in larger boats and appropriately equip them to catch and preserve more high value fish, *it is suggested that material be developed to illustrate the feasibility of the different boats and operations.* The material should include illustrations of the boat models, including the amount of material needed, engine, fishing gear, equipment and opportunities such an investment can provide. The promotional illustrations will have to be presented in a way which make them easy to understand, perhaps as a series of posters of boat models and the opportunities and requirements acquiring it would have. A draft poster/illustration is presented in Attachment 1.
6. To assist fishers interested in investing in a larger boat, *it is suggested to develop feasibility studies of different boat models and sizes to accompany the promotional illustrations.* The studies will have to take into account the cost of building, equipping the boat, operating and maintenance costs, financing options and a cost/benefit estimation to define how much fish the fisher would need to catch in order to make the investment feasible. These should build on the financial models developed in the Project Design Report (PDR) and should emphasise that these are small enterprises that need to be run as a business. The review of extension and promotion methods for operational and small business change in the small fisher sector needs to develop “best practice” methodology for

use by the provincial and district delegation staff. *The extension workers will need to receive training on how to work more effectively with the fishers in order to increase up-take of new methods.*

7. IDPPE collects a lot of data regarding materials needed to build various boats, fishing gear and equipment through the collection of the price of materials and produces estimates of quantities of material needed according to boat model and length. These estimates can be used as the base of the feasibility studies including price lists of fishing gear and equipment from leading input supply companies. Besides this, the institution also collects data on fishers' operations through landing data and interviews by its extension workers. This data is useful in order to understand the seasonality of the fishing activities, costs and income generation. IDPPE already uses economic models to calculate the costs and benefits of various boat models, based on catch and operations data from fishers. These models can be adapted and used for feasibility studies. An example of such a feasibility study can be found in Attachment 2 based on the models developed by the technical division in IDPPE.

8. The financial products and services will need to be identified and integrated into the feasibility study, to include the terms and conditions for fishers to take up loans in order to finance boats. An overview and status of the services being developed is addressed in the discussion on component 3.

Fishing associations

9. Fishing associations were identified as useful in empowering fishers in the design of PPABAS and subsequently 177 associations were established and mentored to have both an economic and social focus. Through talks with members of the Association of Artisanal Fishers of Angoche (AAPA) during the mission, the team learnt that the association provides benefits to its members, such as giving them access to credit, a link between the government and fishers, influence government decisions and a seat on the local administration committee. It would be interesting to discuss the quality of the benefits fishing associations offer their members and there has been no qualitative review in earlier reports. *This could be a focus area which the recruited fisheries specialist could take into account when assessing fishing associations.*

Market Development

10. The marketing aspect of the value chain for fresh and traditionally processed fish is described in the PDR Working Paper 2 as consisting of “points of first-sale” fishing centres in existing and planned growth poles, which can provide fishers with inputs to maintain the quality of their fish and transport links to other markets and outlets. ProPESCA aims to improve the market structure by enhancing “points of first-sale” and municipal markets. Unfortunately, the markets in the project area are not functioning adequately. They are either unfinished, not operational or operating without sufficient funds for effective operation and maintenance.

11. “Points of first-sale” and municipal markets are owned by the local and district authorities, and operated by market management committees. The committees collect fees from users of the market's services, which are sent to the authorities. The authorities are meant to release a part of the fees back to the committees to cover operating costs, such as cleaning of the markets. However, at the “first point of sale” in Sangoge, the committee received only 30% of the fees to cover the costs of cleaning the market while additional funds to cover maintenance costs have to be requested for. A similar issue was identified with the unfinished municipal fish market in Nampula, where the municipality keeps 100% of the fees collected and the operating and cleaning of the market is the responsibility of the committee without any resources made available. The concern is that the authorities choose to use the fees from the markets for other operations and resources are not readily available to cover operational and maintenance costs. Moreover, it is also of concern that the Market Committees are expected to operate on a volunteer basis, and that the management of sub-businesses in the markets, such as for ice-making, have not been privatized as foreseen. Buying and selling of fish is a business and one that needs to be underpinned by a well operated and maintained facility (including waste management) – i.e. it needs to operate as an enterprise. The current operational model may need to be reviewed in order to ensure that robust and fair agreements guarantee the operation and maintenance of the markets, which can only occur with sound incentive structures that

reward good management. This was addressed during a “brain-storming” session between the mission team and IDPPE staff. Various approaches were discussed to improve the management structure of the markets and although no mutual agreement of actions was reached at this stage, the session laid the base to consider and develop alternative approaches.

Co-Management

12. The concern of management of funds between partners and district authorities was also raised by the Fishery Community Council (CCP), an NGO who issues the fishing licenses on behalf of the authorities, are meant to receive 10% of the fees collected. Unfortunately this is not being done effectively due to the fees being sent in full to the authorities to register and the agreed share not being returned to the CCP. This is being addressed by ADNAP under Component 4.

Policies to support ProPESCA

13. The Growth Pole Planning exercises are expected to highlight possible areas where policy changes/additions maybe necessary, in order to accommodate the development of ProPESCA. As such the mission has reviewed the existing fisheries policies which were identified in Working Paper 7 of the PDR to identify if these have been updated or if other interventions may be appropriate..

14. The Fisheries Master Plan (PDP) for the 2010-2019 period was not significantly changed from the previous plan, with objectives relevant to ProPESCA being: i) for the fisheries sector to reduce food shortages by contributing more to the national food security, ii) improve the living conditions of fishing communities, iii) the contribution of industrial fisheries for the economic and social development objectives increased, and iv) the net foreign exchange revenue generated by the sector increased.

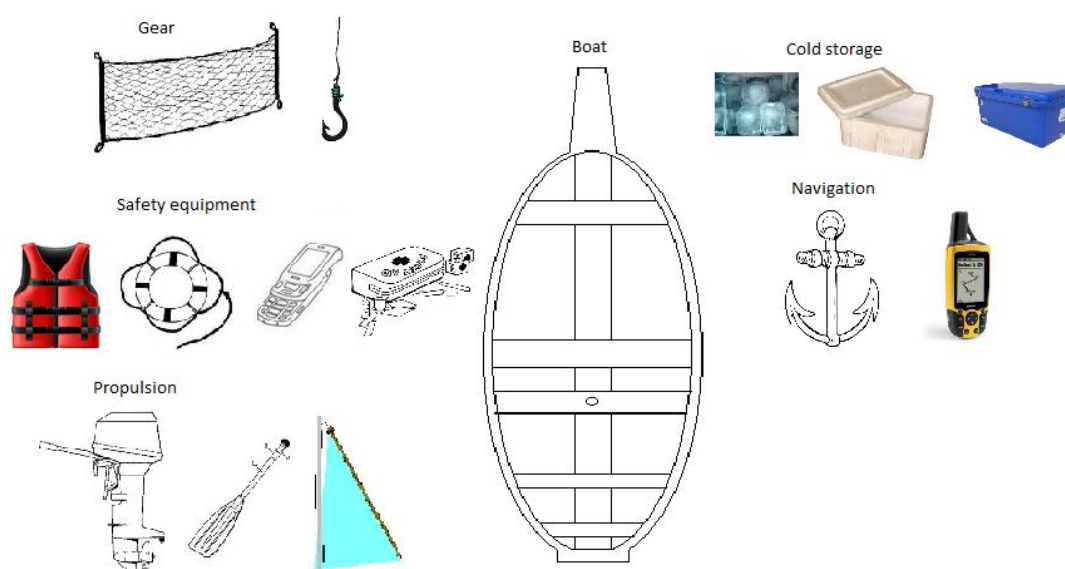
15. The components of ProPESCA all correspond to the Strategic Plan for Artisanal Fishing Sub-Sector (PESPA), the immediate objective being “Improved living conditions in the communities of artisanal fishermen”.

16. Some activities which may be affected by existing policies are the activities of the IIP regards performing fish stock surveys in the coastal waters at 5-50 meters depth. The concern is what legislation exists regards the survey going beyond the exclusive 3-mile-zone for artisanal fishing, as it is expected that waters of 5-50 meters depth also exist further off the coast. The base work needed to assess the resource base in this zone will commence in 2013 under Component 4 (by IIP).

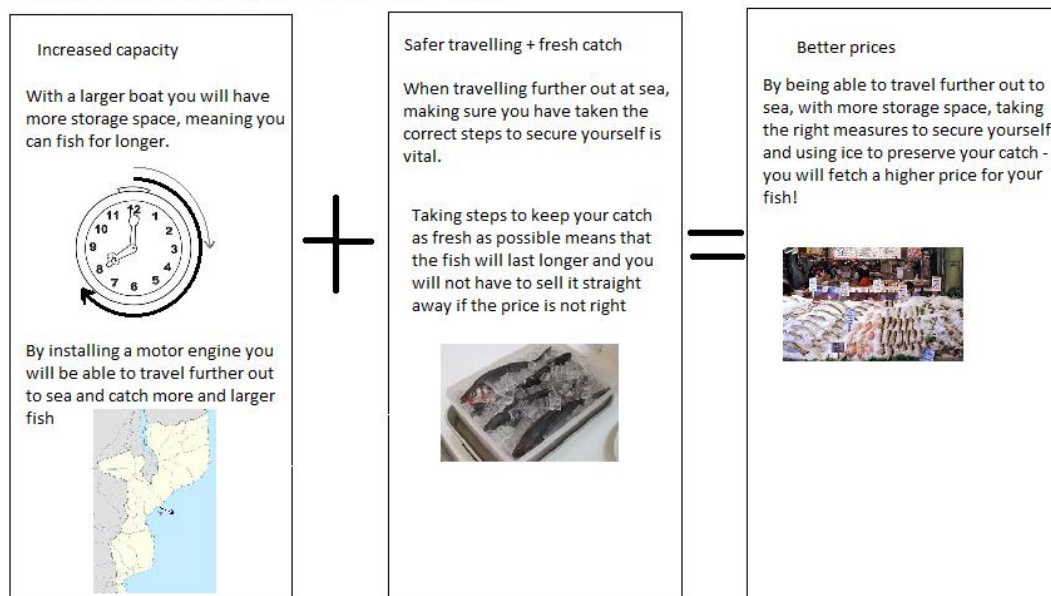
17. Currently IDPPE is lobbying to change the legislation regards the length of boats considered as artisanal fishing boats, to accommodate the development of larger fishing boats in the sub-sector.

Attachment 1

Draft Poster/Illustration to Illustrate the Feasibility of the Different Boats and Operations



The benefits of fishing with a larger boat:



Attachment 2

Feasibility Study of a Pirogue (Example)

Unidade de Pesca: *Piroga*

Arte: *Emalhe e Palangre*

Base: *Zona Norte*

Pescaria: *Pequenos pelagicos e dimersais*

Moeda: *Mt*

1. Capturas

Definir

Rendimentos Medias (Rede)

Nº de Lanças/dia	3.0	#
Kgs/Hora de Pesca	5.0	Kg
RMD	40.0	Kg/Dia
Captura Mensal	600	Kg/Mês
Captura Anual	4 195	Kg/Ano

2. Actividade

Fainas / Mês	5	#
Dias de Pesca / Mês	15	#
Meses / ano	11	#

3. Tripulação e Remunerações

Definir

3a. Remunerações em Dinheiro (Mt)

	Nº	Fixo/Mês	Prémio/Kg
Mestre	1	10000	0.5
Motorista	1	8000	0.5
Tripulant	6	4500	0.5
		Media	0.50

3b. Divisão de Capturas

	% categoria	% grupo	% cada um
<i>Tripulantes</i>	35%	0	0
Mestre	0	0%	0%
Motorista	0	5%	5%
Tripulant	0	30%	5%
<i>Patrão(ões)</i>	65%	0	0
Dono Barco	0	50%	0
Dono Arte	0	15%	0

3c. Remunerações Totais Mensais por Pessoa

Mestre	475	Mt
Motorista	475	Mt
Tripulant	2 852	Mt
Total	18 062	Mt

4. Preços

		Composição
P1	0	Mt/Kg 0%
P2	60	Mt/Kg 100%
P3	0	Mt/Kg 0%
Outros	25.0	Mt/Kg 0%
Combustível 1	60	Mt/L 100%
Combustível 2	0	Mt/L 0%
Óleo	300	Mt/L
Carvão	0	Mt/Saco
Isca	0	Mt/Kg
Gelo	3	Mt/Kg
Licença (Anual)	500	Mt/Ano

5. Consumo

Alimentação	200	Mt/Faina
Isca	350	Kgs/Faina
Combustível	40	L/Faina (Viagem)
Combustível	40	L/Dia de Pesca
Combustível/Óleo	1	L/L
Gelo/Peixe	0.5	Kg/Kg
Carvão	1	Sacos/Faina

6. Investimentos, Vidas e Depreciação

	Investimento	Vida (Anos)	Dep'ção/Ano
Barco	160 000	Mt 8	20 000
Material	120 000	Mt 2	60 000
Motor	129 860	Mt 5	25 972
TOTAL	409 860	Mt	

7. Manutenção

	Unidade	Periodo	M'tenção/Mês
Barco	5	% Ano	727
Material	2	% Mês	218
Motor	5	% Ano	590
M'tenção geral fixa	10000	Mt Ano	833

8. Financiamento

Auto-Investimento	0%	0	Mt
Empréstimo	100%	409 860	Mt
Termo	60	meses	
Juros	24.0%	anual	
Prestação Mensal		11 251	Mt
Pagamento Anual		135 015	Mt

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9. Balancete

Custos Operativos (MENSAIS)			
Fixos			
Salários	45 000	Mt	
Licença	42	Mt	
M'tnção Fixa	833	Mt	
Outros	0	Mt	
TOTAL	45 875	Mt	
Variáveis			
Prémios	4 320	Mt	
Alimentação	217	Mt	
Isca	0	Mt	
Combustível e Óleo	4 989	Mt	
Gelo	40	Mt	
Carvão	0	Mt	
M'tnção Barco	727	Mt	
M'tnção Material	218	Mt	
M'tnção Motor	575	Mt	
Outros	0	Mt	
TOTAL	11 086	Mt	
Receitas (MENSAIS)			
Venda de pescado	42 120	Mt	
SALDO BRUTO (MENSAL)	(14 841)	Mt	
SALDO BRUTO (ANUAL)	(209 131)	Mt	

10. Resultados e Indicadores

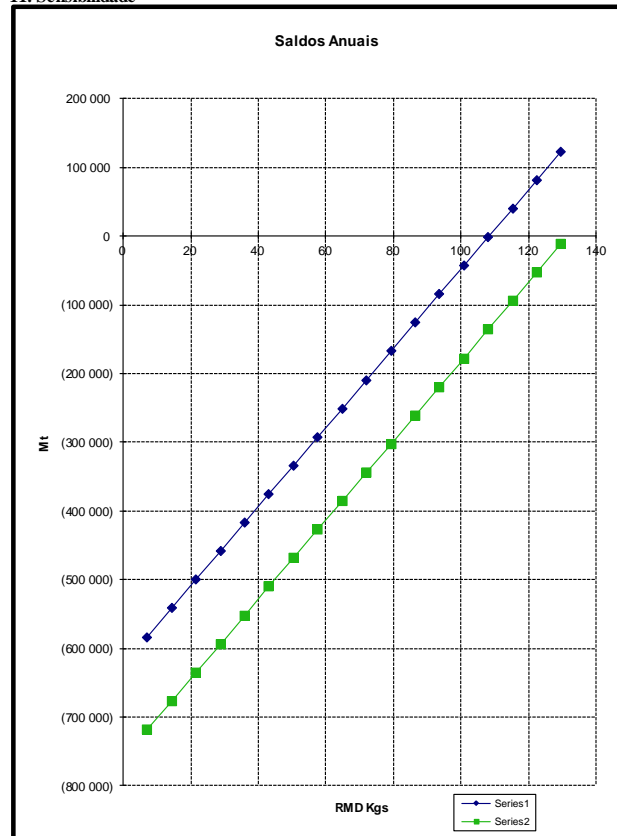
Saldo Bruto Anual	(209 131)	Mt
Saldo Anual depois da depreciação	(315 103)	Mt
Saldo Anual depois de financiamento	(344 146)	Mt
Receitas / Invest'o		
Antes de depreciação	-51%	
Depois de depreciação	-77%	
Razão de Serviço de Dívida (a)	(1.55)	
Período de reembolso (b)	1	Anos
Custo unitário de produção (c)	67.97	Mt/Kg

(a) excluindo depreciação (b) capital, excluindo juros
(c) incluindo custo de financiamento

Factor	1
RMD Proposta	72.0 Kg/Dia

		Saldo	
Capturas diárias		Bruto	depois Finan
factor	72	(209 131)	(344 146)
0.1	7	(583 351)	(718 366)
0.2	14	(541 771)	(676 786)
0.3	22	(500 191)	(635 206)
0.4	29	(458 611)	(593 626)
0.5	36	(417 031)	(552 046)
0.6	43	(375 451)	(510 466)
0.7	50	(333 871)	(468 886)
0.8	58	(292 291)	(427 306)
0.9	65	(250 711)	(385 726)
1	72	(209 131)	(344 146)
1.1	79	(167 551)	(302 566)
1.2	86	(125 971)	(260 986)
1.3	94	(84 391)	(219 406)
1.4	101	(42 811)	(177 826)
1.5	108	(1 231)	(136 246)
1.6	115	40 349	(94 666)
1.7	122	81 929	(53 086)
1.8	130	123 509	(11 506)

11. Sensibilidade



Appendix 2: Economic Infrastructure

I. INTRODUCTION

1. This Annex addresses the investments in the growth poles' economic infrastructure, which support ProPESCA's desired outcome of increased value of fish traded from the artisanal sector in coastal areas of selected growth poles, by facilitating conservation and marketing activities. These investments include three categories: (i) Rehabilitation of rural roads; (ii) Extension of the rural electricity grid; (iii) Introduction of innovative solar energy means of making ice.

2. The Annex is structured in two parts: (i) review of the current road and electrification situation, with proposed criteria for prioritizing investments; and (ii) presentation of possible solar energy initiatives by IFAD in Mozambique: lessons learnt from PPABAS, solar thermal ice making technology to be piloted in ProPESCA and a detailed workplan for the proposed pilot.

II. ROADS AND ELECTRIFICATION

A. Roads

3. The development of many growth poles (GP) which offer considerable fishing potential is currently constrained by the quality of access roads. As noted in the PDR's Working Paper 1, aside from two growth poles, the condition of access roads to province capitals is considered reasonable to excellent. In the PDR it was assessed that tertiary roads however require rehabilitation or maintenance in 17 of the then 26 GPs, entailing on average 30 km of road works.

B. Electrification

4. Ice is essential for proper handling and marketing of fish. Ice production is however difficult in places not connected to the national electricity grid. Of the initially foreseen 26 growth poles, 23 were expected to be connected at the time of project start-up or during its first year of implementation, excluding the "emerging" pole of Ndjalane/Casa Partida, and the "potential" poles of Sambazò and Chiloane. Excluding these last two, it is estimated that 11 GPs will require electrification works, for an average of 7 km of power lines.

C. Criteria for prioritizing road and grid investments

5. As it is unlikely that ProPESCA will have the financial resources to be able cover all desired road and grid works, criteria for prioritizing the investments were developed with the PCU at IDPPE.

6. The following criteria will indicate advantages or disadvantages arising from conducting infrastructure works affecting the GP in question: (i) Volume of fish passing through the connected GP each month; (ii) Potential social improvement due to the works (including education and health services). The factors contributing to social improvement will be evaluated in terms of proximity to schools and health centres. To this end, an adapted version of the Indicator of Potential Development (IPD) will be used, as shown in the table below; (iii) Cost of the works per person benefiting. This will depend on the nature of the works. In case of road works, the population along the whole road may be considered. For electrification, only those potentially able to use the electricity – rather than all those living near the new power lines – should be considered. The electrification works should consider step-down transformers at every village encountered along the proposed path, and not just one at the end of the line; (iv) Cost of the works per km.

Table 1: ProPESCA adapted version of the Indicator of Potential Development

IPD Index	Weight	Criterion	Weight	Sub-criterion	Value
Health	1/3	Health posts	1	None	0
				First Aid	2
				Dispensary or maternity hospital	4
				Health center without surgery unit	5
				Health center with surgery unit	8
				Hospital	10
Education	1/3	Adult Literacy	2/3	Training structure	10
				None	0
		Schooling	1/3	Primary	1
				Secondary	3.3
				Tertiary	8
				None	0
Local Economy	1/3	Population	1/8	0-300	0
				300-1,000	2
				1,000-5,000	5
				>5,000	10
		Market	1/8	Daily	10
				Weekly	5
				Occasional	2
				None	0
		Credit and Savings	2/8	Bank	1
				Microfinance institution	7.5
				None	0
		Distance from other infrastructure considered here	3/8	Roads or Grid: connected	10
				Road: 0-5 km; Grid: mains closer than 1 km	5
				Road: more than 5 km; Grid: mains farther than 1 km	0

7. These will be weighted according to the relative importance of each in the overall assessment, and defined as positive or negative according to whether they present an advantage or a disadvantage. The weighted values will then be added together to provide a final value, which will be used to compare a proposed solution against other similar estimates. An example is provided below:

Option A (location x; road or grid)	Weighting	Unit	Value	Weighted value
Volume of fish through connected pole	30%	t / month	30	9
Potential social improvement (education, health services): IPD	30%	#	2	0.6
Cost / person benefiting	20%	USD	15	3
Cost / km	20%	USD (000)	12.5	2.5
Total = (Volume of fish + social potential) - (Cost / person + cost / km)				4.1

III. SOLAR ENERGY INITIATIVES

A. Lessons learnt from PPABAS

8. The mission reviewed the status of operation of two of the four solar-powered freezer and solar (photovoltaic) panel arrangements installed under PPABAS. In one case, the freezer had been inactive since the system's latest breakdown about 4 months prior to the supervision mission, and in another it was found to provide refrigeration until about 2-3 am, at which point it ran out of power until sunrise.

9. Conversations were held with the local community on location, and subsequently a meeting was held with MoçItaly Lda, the supplier of the machines, to determine the causes and possible mitigation measures.

10. It was determined that although representatives from the community had been trained, they were found to lack basic understanding of how the system worked, they did not always know how to operate the system correctly, nor how to ensure the required repairs were carried out once a breakdown occurred. This highlighted the need for more effective training to address these risks, as well as assessing upon completion how successful the training had(s) been. The lack of effectiveness in solving problems as they arose may also be partly due to the "community-managed" business model, which has repeatedly proven ineffective in similar circumstances, possibly due to unclear division of responsibilities and lack of a clear understanding of whose interests stand to gain by the good management of such a resource. The ineffectiveness of this business model was also verified by the mission with regard to the management of the market infrastructure built to date.

11. The current procedure for reporting faults in a system at the moment foresees the following chain of communication: Community member → IDPPE local office → IDPPE Maputo → MoçItaly Maputo, who then provide IDPPE with an estimate for conducting a visit to the site and repairs. This system was found to be ineffective, due to the amount of steps required in communicating the problem to the suppliers, and the need for extra funds for the regular replacement of components.

12. Concerning the insufficient amount of power, it was determined that the tender made available by IDPPE, requesting proposals for providing the solar-panel and freezer systems did not provide sufficient detail to require appropriate sizing of the system. Regarding the failures of the components, it was found that a lightning bolt had hit the system and damaged the inverter indicating that the necessary protection was not provided for.

13. Additionally, MoçItaly raised concerns about the ability of the responsible community members to manage the systems adequately under their responsibility, citing for example the over use of the system for purposes not foreseen initially, such as to charge mobile phones.

14. In light of the above, it was agreed to take the following steps. The PCU will define future tenders for solar systems in more detail. The additional requirements will include more accurate dimensioning, inclusion of components that would protect the system against lightning, damage due to wind and water coming in contact with the electrical circuits, and better training and certification of the local workforce.

15. For the protection of the systems against lightning and overcharging, future tenders will include a provision for components such as lightning rods, surge protectors, fuses, and circuit breakers. A time-limited guarantee will be required, providing for replacement of damaged parts and adaptation of the system where possible to prevent re-occurrence of these types of problems.

16. For better training and correct operation of the system, the tender will require from suppliers a definition of desirable profiles for personnel in charge of the system. The project will identify specific people who will be trained by the supplier, and certified as meeting standards for operating the system provided under the supplier's responsibility. In case of failure to perform by these people, the supplier will be responsible for additional training and replacing damaged components.

17. In order to facilitate retention of trained people, these will be certified every year by the supplier as having managed the system, and providing details for occurrences of problems and how they were solved.

18. In order to assist action in case of damage or failure of the system, an illustrated manual will be provided listing the main causes and actions to be undertaken for repair, including contacting the supplier directly in case of need, and the local representation of the Ministry of Fisheries in case of inaction by the supplier.

19. It is clear that as it is, the current initiative provides little benefit: after the initial investment (of roughly USD 22,000 per system), the systems have, for a variety of causes, broken down repeatedly, and eventually not been fixed once the guarantee period had expired. In order for these systems to provide a benefit to the communities, the above-mentioned changes must be applied: (i) change in ownership model, with simplified allocation of responsibilities (including the possibility of a single-owner business model); (ii) more effective training, to ensure deeper understanding of the requirements for operating and maintaining such a system; (iii) certification of training procedures and adequacy of the owner to perform selected tasks; (iv) more direct assistance procedure, with direct contact between user and supplier; (v) improved dimensioning of the system; (vi) provision for making changes to the current system to protect against damage caused by weather and inappropriate use.

B. Solar thermal ice making

Background and Introduction

20. This section presents a solar thermal ice making technology that may be useful for deployment in areas where the national electric grid is absent and the demand for ice is sufficiently high. It also includes a plan for conducting an initial test. Details on the technical operation of the solar ice maker and a financial analysis are presented in the attached concept note. Each machine makes about 50 kg of ice each night.

21. This technology provides a means for making ice overnight, ready for use in the morning. It does not, however, enable the conservation of ice, thus it may be necessary to combine it with a means of storing ice using renewable energies such as the above-reviewed solution of solar photovoltaic panels and freezers, with suitable changes taking into account the lessons learnt so far.

22. The mission to Angoche and Moma districts (Nampula Province) in September 2012 highlighted the fluctuation of price across different areas. Ice is generally procured by fishermen from local households, and even though it is reported to be sufficient for the fishing community's requirements, with the price found to peak at a maximum of MZM 25 per 5 kg brick, or MZM 5 per kg, it is unlikely that small domestic production will be sufficient for expanded production and longer fishing trips, especially in non-electrified areas.

23. It was also noted, regarding markets and solar-powered freezers, that operation and maintenance of the infrastructure were not being carried out adequately, and as a result the infrastructure – when completed – was rapidly degrading. The business model commonly applied (community-managed with shared responsibilities) was found to be ineffective, as even within the management committee nobody was taking responsibility or initiative for undertaking the necessary actions and follow-up. It was hence decided during the mission to apply a single-owner business model for this pilot.

24. It was agreed that a pilot project be carried out in order to assess technical and financial feasibility of using solar energy directly rather than converting it into electricity – most solar systems don't generate enough power to make sufficient ice for even artisanal fishers. The factors listed below will all vary depending on the chosen location for the ice maker.

Conditions to be met

25. The following conditions should be in place in order for the system to be financially viable: (i) presence of a market with sufficient volumes of fish and a high demand for ice by the

fishing community; (ii) low availability and high price of local ice; (iii) availability of materials required for operation and maintenance of the machine (See paragraphs 27-30 below); (iv) a local operator who can run the system after project completion without external support.

26. Weather: sunlight and heat are the main physical requirements for the effective operation of the machine. This requirement translates into the need to locate the solar ice maker away from possible sources of shade. For Maputo, studies show a yearly average of 7.5 hours of sunlight per day, ranging between 6.6 hours in November and 8.3 hours in July, and an average temperature of 23°C, ranging between 20°C in June-July and 26°C in January through March. As Maputo is in the south of the country, most growth poles are generally warmer, with temperatures being higher by on average 2.5°C in Nampula region. The average amount of solar radiation in Maputo is 5,3 KWh/m²/day, over the whole country it is 5,7 KWh/m²/day.

Planning and Procurement of inputs

27. Water is needed in the amount of 50 l/day for one machine (it will be turned into 50 kg of ice overnight). This may be procured locally, normally for free. For the working fluid inside the machine, 23 US gallons (= 87 l) of de-ionized (purified) water are required.

28. Each machine requires roughly 63 kg of anhydrous ammonia (which is then mixed with water inside the machine to form the working fluid). Assuming small leakages due to evaporation in its gaseous form, a safe estimate would be to assume yearly replacement of 25% of the amount.

29. Spare parts will be required for maintenance of normal wear & tear of components. These are expected to be small (yearly expenses are estimated at USD 100), and normally obtainable from the nearest city (estimated at half a day's travel by bus or motorcycle). In case of large repairs or the requirement for specific parts, the supplier will be contacted in accordance with agreed procedures regarding procurement, maintenance and training for operation and maintenance.

30. In a worst case scenario, these inputs are available in Maputo, aside from the anhydrous ammonia which will be imported from South Africa.

Sites

31. The proposed site should ideally be off-grid, distant from ice-producing centres (possibly but not necessarily due to poor roads), and producing more fish than required for local consumption (or with potential to do so, in cases where fishermen only operate on a minimum needs basis). These conditions should be conducive to a market where the machines can be operated profitably.

32. Two GPs are mentioned in the design document's Working Paper 1 – Growth Pole Strategy as having potential but being off-grid, both in Sofala: Sambazò, in Mwanza, and Chiloane in Machanga. The conditions listed above, as well as ease and practicality of access, should be assessed for these two locations. The emerging growth pole of Ndjalane /Casa Partida will also not be covered by the national electrification programme, and other districts with sub-optimal conditions for creating poles are listed in paragraph 21 of WP1.

33. Additionally, road access to Chiloane is considered poor, limiting access to other potential ice-producing centres; and one well-established and 8 emerging GPs need electrification. The majority of these works are expected under the current project plan.

34. Working Paper 3 – Supporting Development of Higher Value Fish, mentions a selling price of around MZM 9 / kg without the support of delivery services, which now form part of the new ice plant venture (paragraph 24). Table 1 (p.5) has an estimate of ice demand per growth pole and may assist in selecting poles for intervention, based either on estimated growth or on current availability.

35. Moreover, it was decided that four new poles not included in the original project design will also be established, concentrated in the provinces of Zambezia and Sofala. These should be included for consideration in selection of potential sites.

Dimensions

36. The ice makers are roughly 2.5 m wide x 5 m long x 3 m high. The area required for their installation is larger (4.5 m wide x 7 m long), and perimeter fencing should also be built all around to prevent animals or children from harm to themselves or the equipment, at a distance of at least 1 m from the machines. This is a concern due to the potentially very serious consequences of being exposed to a leak of ammonia gas of high concentration (for example due to rupture of the tube) or to the high temperatures reached by the machine.

Costs and Financial Analysis

37. Detailed data on costs for both setup and operation and maintenance are provided in the attached concept note. Capital costs required for setup include procurement, logistics and setup (MZM 1,092,263 or roughly USD 38,000 per machine). Costs for operation and maintenance include procurement of inputs, spare parts and repair works, for an amount of MZM 11,400 (USD 400 per year per machine). The financial model used is based on that used in the PDR, WP12 (Financial and Economic Analysis), for domestic ice production, with suitable modifications applied. The benefit/cost ratio is estimated at 1.84, and the IRR at 7%.

Suppliers and support companies

38. Based on research before and during the mission, only a single US-based supplier exists worldwide for small-scale applications of this technology. Local companies for maintenance and repairs will need to be trained during the pilot phase.

Procurement and Financing

39. Pilot: during initial contact with the supplier, it was mentioned that they intend to ask IFAD to cover USD 50,000 and seek cofinancing from USAID for the remainder. While the possibility of USAID cofinancing is appreciated, it is proposed to keep the pilot simple and thus that the PCU contract the supplier directly with project funds, thus financing the installation and TA support fully. For a possible expansion, a matching grant may be considered to support the setup of the new ice makers, and the government may request IFAD later to approach USAID for cofinancing.

40. A financial analysis as well as suggested approach to project-funded grant support to the entrepreneurs for investing in these machines is provided in the attached concept note.

41. For possible defects, a suitable period of guarantee should be agreed upon by the supplier and PCU. Two years appears a reasonable period. Running costs should be sustained by the operating entity from the outset from revenue from the sale of ice.

Ownership and management arrangements

42. Setup and management of the ice makers will be entrusted a local entrepreneur to be selected by community and project staff, with input from the supplier, who will be trained and assisted in the initial phase. This entrepreneur may employ other local workforce to operate the machine daily². This setup is deemed more effective than the option of entrusting O&M to a group of representatives from the community, in view of past experience. Building on lessons learnt during this mission with regards to the management of the solar photovoltaic freezers installed during PPABAS, it is suggested that an arrangement be reached with the supplier, whereby: (i) the supplier provide an “ideal profile” of the person in charge of operation and maintenance of the machine; (ii) the community nominates at least two individuals, possibly with input from the PCU; (iii) these persons are trained by the supplier; (iv) at the end of the training the supplier certifies the individuals’ adequacy to perform the required operation and maintenance tasks.

43. Once the operators have been jointly selected and certified by the supplier, a management agreement with the PCU will be drawn up in which the entrepreneur guarantees sound and consistent

² The following roles are clarified here to assist in understanding the model : (i) the entrepreneur will be a business person who will be in charge of managing the machine and financial aspect; (ii) the operator will be the person in charge of operating and maintaining the machine on a daily basis. This may be the entrepreneur, or another person employed by the entrepreneur; (iii) the entrepreneur may become the owner of the machine, following successful performance for three years, as detailed in the next paragraph

management of the ice maker and the quarterly submission of reports in return for the exclusive right to use the machine for a 1-year period, which is extendable twice. After every year, the PCU will carry out an assessment of the management quality of each entrepreneur, based on which first a 1-year extension will be provided. After the third positive assessment, an ownership transfer agreement will be drawn up, making the entrepreneur the owner of the machine, with the only obligation of providing quarterly reports.

Productivity targets

44. Each machine can produce 50 kg/night, ready to be collected in the morning. In the second phase of the pilot (field testing), demand will be assessed: it is estimated that fishermen using traditional means require 50-100 kg/day each, and fishermen using the Senegalese pirogue being introduced by the project may require upwards of 300 kg per trip. Hence, a production of 50 kg/day should easily be absorbed by a single village. Whereas generally fishermen require twice the weight of ice to conserve a given amount of fish, ProPESCA aims to achieve a 1:1 ratio. Should the fisherman require more than the amount that made by the ice maker, they are expected to try to source it locally, as is done now. It may also be good practice to book the ice in advance from the operator, so that the fishermen can be sure of supply and the operator of the off-take. It is also recommended to encourage fishermen to collect the ice early in the morning as the ice makers have no possibility of cooled storage. As mentioned above, there may be a need to combine ice production with a storage method (solar photovoltaic + freezer combination), as this machine can make ice but not conserve it.

Arrangements with the supplier – see also Ownership and management arrangements above

45. The supplier would be responsible for installing the ice makers completely up to the functional tests within a deadline to be specified in the contract. Penalties for late delivery would be included, as will be a clear definition of force majeure. Equipment, international transport and setup would be arranged by the supplier upon provision of basic information regarding logistics (ports, roads, etc.) by the PCU. The supplier would be responsible for arranging the local purchase of materials, the local manufacture of certain components, where possible, and the training of these manufacturers. The supplier would also be responsible for training a local maintenance mechanic (individual or company). The supplier would also be responsible for technical training of the operator (minimum of 3 beneficiaries – one business manager and two day-to-day operators - to be trained and certified per machine) and a minimum of 1 staff each from IDPPE FUNAE, and possible other interested public and private sector parties in basic functioning and operation of the ice makers.

46. Regarding maintenance, an arrangement will be reached with the supplier regarding the type of regular maintenance works, the regularity and the local maintenance mechanic to carry them out. Regular maintenance will be paid for by the operator. The supplier will provide in-country support for one week at setup, and conduct three follow-up visits to provide support, additional training and troubleshooting as required. The project will arrange for regular field visits in order to monitor and support activities, at intervals of 2 weeks each for a minimum of 4 visits until project staff is satisfied that local capacity can provide adequate management, operation and maintenance.

47. The supplier contract would include a time-bound guarantee for repairs due to any failures that are beyond regular maintenance works and that are due to faulty design or manufacturing. The guarantee will not include faulty operating or external damage, such as by storm or vandalism.

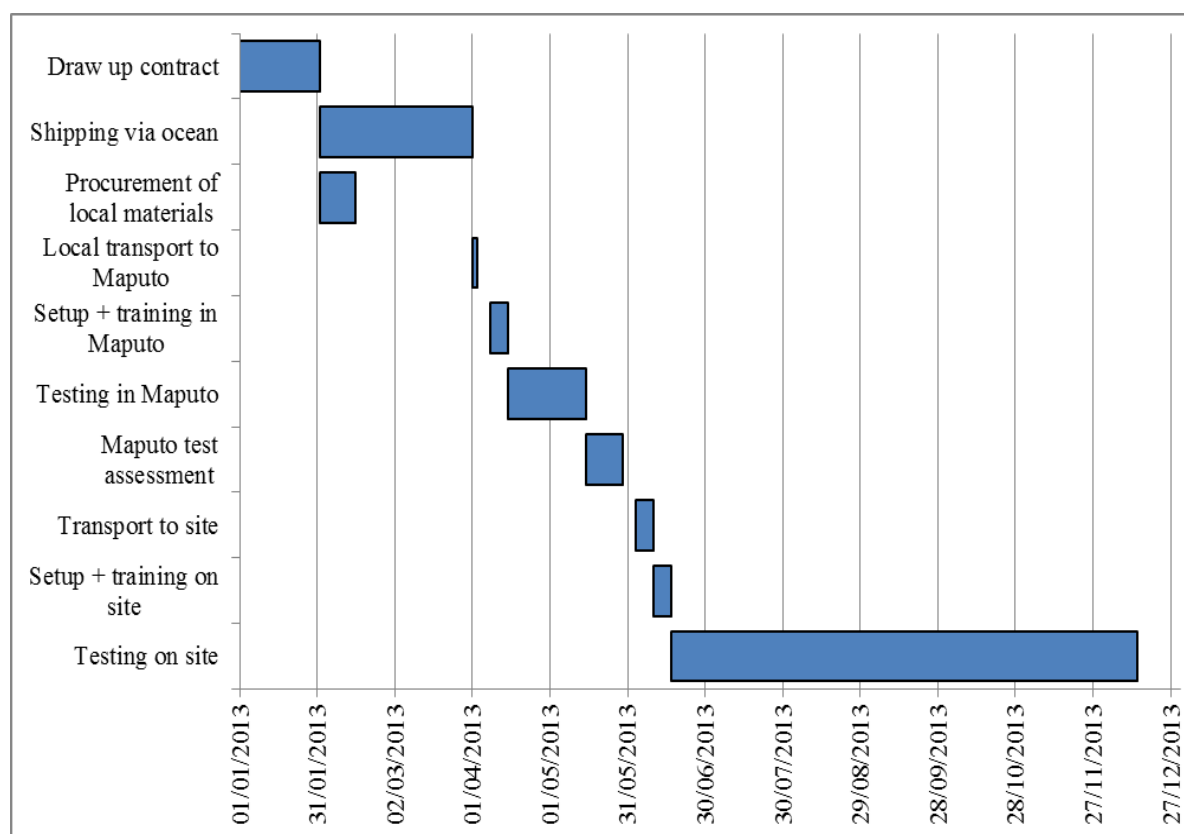
Operator training requirements

48. The entrepreneur and operator will require training in: (i) operation and maintenance (O&M), including the functioning principle of the ice maker, the recommended daily routine including cleaning works, and regular maintenance and simple repairs; and (ii) the entrepreneur will be trained in simple business management, including basic business planning, accounting, cash management and contingency planning (setting aside a proportion of profits made from the sale of ice to be used for O&M). Both types of training will include follow-up sessions after the initial training conducted at set-up. At the end of the training, the operator should know how to run the business. The business management training will be provided by a service provider contracted by the project.

49. It is suggested that an illustrated manual with flow-chart type storytelling be designed by the supplier and used in the training, explaining maintenance procedures to be followed according to the most common scenarios. The manual should cover all key aspects of the O&M training and some of the basic principles of the simple business management training.

C. Detailed Workplan for the Ice Maker Pilot

Figure 1: Gantt Chart with indicative scheduling and duration of tasks



Pilot Phase I – testing ice-making capability

50. The first phase will consist of procuring, installing, and testing a machine in Maputo for a minimum period of one month to verify its ability to make 50 kg of ice a day.

Procurement

51. There is one supplier currently on the market, based in the USA. A contract will be drawn up with this supplier, including provision for the following: (i) components (both imported and made in Mozambique, specifying materials and means of fabrication for the latter); (ii) transport (including logistics for delicate and/or large components); (iii) site selection requirements (including ideal resting base, perimeter fencing and distance from nearest objects which may cast a shadow across the solar thermal collectors); (iv) setup and capacity building (including training of IDPPE staff and other interested third parties); (v) spare parts for 18 months of operation and a bill of materials listing all components required (including spare parts) for the same duration of operation.

52. A guarantee will be agreed upon, specifying what replacement and repairs are included based on suitability of parts and materials and appropriateness of use. Provision will be made for additional training in replacement and repairs if needed. The illustrated manual should be provided.

Setup

53. The PCU will select an adequate location for testing the machine where it can demonstrate its ability to deliver the expected results. This initial site will be located within easy access of one of the Provincial delegations to reduce the cost of monitoring.

54. The PCU will request a description from the supplier of an “ideal” profile for the person to be given responsibility for operating the ice maker. Depending on where the ice maker will be located for the initial test – whether near IDPPE or a fishing community close to Maputo – the PCU will select an appropriate person. In phase II this will be a person from the local community.

55. The supplier is to source materials, including those which are to be procured and/or made in-country. This is to ensure the sourced materials are approved of by the supplier, and will simplify their procurement.

56. Interested parties will be notified by the PCU well in advance so that they may be present during assembly of the solar ice makers.

57. The supplier will arrange with the supplier for delivery of all components to be imported and ensure that locally sourced components are available by date of reception.

58. Once all materials are procured and a suitable location has been chosen, the supplier will carry out the setup and training (assembly, operation and maintenance) in the presence of interested parties. Following completion of setup and training, the supplier will certify the operation of the machine, and that training has been conducted and the persons satisfying the supplier’s requirements are qualified to operate the ice maker and conduct maintenance.

Test

59. The person selected for operating the ice maker will conduct a test for a minimum period of one month.

The system comprises several components connected by circuits which are regulated by valves (diagrams and a more detailed description of the components and their function are provided in the attached concept note). Twice a day, the following tasks will need to be performed: filling or emptying the water/ice container, and switching the three valves on the system.

Each day before sunset, the operator will fill up the water container, close the “vapor valve” (regulating the flow of working fluid from the generator to the condenser) and open the “evaporator valve” (allowing the working fluid to evaporate out through the water container). Also, they will open a third valve, the “thermosyphon valve”, which enables the cooling of the generator at night.

At sunrise, the operator will invert all three valves: close the evaporator and thermosyphon valves, and open the vapor valve. The ice will be removed to be stored or sold. The cycle can then start anew. It is recommended that the water container be refilled as late as possible in the evening.

60. The operator shall weigh the ice produced every morning, and record the result. If possible, the following measurements should also be taken before filling the water container, and after removing the ice: temperature and pressure of operating fluid, temperature of the water (only when filling the container) and temperature of the recipient for the working fluid immersed in the water/ice container. The operator of the ice maker should note whether the machine performs according to expectations, and what factors influence its effectiveness, notably with regards to the weather.

61. The PCU will collect weather data for the days of the test from a nearby weather station.

62. At the end of the test, or at least once a month, the working fluid should be checked for losses of pressure; the mechanical components of the machine should be checked for maintenance requirements, due to corrosion or other types of damage.

63. The test will be considered successful if the machine produces on average 45 kg of ice per sunny day over a 30-day period (90% of the specification of 50 kg per day).

Pilot Phase II – testing effectiveness in the field

64. Following successful completion of the initial phase, the machine will be moved to a remote village to be tested for a period of 12 months to verify its performance under realistic conditions and its financial feasibility. A location will be selected by the PCU according to the factors given above.

65. Having selected the location, it is important to arrange for transport ahead of time. This may require planning due to: road conditions; need to transport the ice maker over water; etc.

66. A local entrepreneur will be selected by project staff to manage the ice maker, and trained in financial management.

Local operators will be jointly selected (see Ownership and management arrangements), and together with the entrepreneur, trained in O&M by the supplier, and provided with the illustrated manual. The operators will be responsible for O&M, and the entrepreneur will be responsible for recording the daily quantity of ice produced, the sales volumes and price, and any other occurrences.

67. The supplier will conduct three visits at regular intervals to assist in operation, maintenance and troubleshooting. The PCU and the nearby IDPPE delegation will conduct regular field visits for 12 months to oversee the smooth running of the test, including issues to be addressed in view of the possible large-scale implementation of the technology. The PCU will collect daily weather data for the period from a nearby weather station. Text, photo and video documentation should be carried out and disseminated to facilitate knowledge sharing and dissemination of lessons, as well as with a view to encouraging further investment in the technologies by other local entrepreneurs. Potential interested entrepreneurs will be conducted on visits to the machine which is already operating during this year.

The test will be considered successful if the machine produces a total of 16,400 kg of ice in a 365-day period (90% of the specification of 50 kg per day, rounded down).

Attachment 1: Concept Note

Solar Ice Makers for Fishing Communities in Mozambique

I. INTRODUCTION

A. Country Background

Overview

1. Mozambique is one of the world's poorest countries. Despite its impressive economic growth rates and despite the encouraging development progress made by the government in recent years, poverty continues to be severe and widespread. By 2008-09, the year of the latest national household survey, the number of Mozambicans living in absolute poverty had been reduced to 54% from 70% in 1997. Although there has been a positive trend since 1997, the number of poor people has been stagnant the last five years, with a marginal increase of 0.6%. Consequently, the vast majority of the rural population still lives on less than USD 1 a day, and lacks basic services such as clean water supplies, and access to health facilities and schools. Poverty is still predominantly a rural phenomenon in Mozambique. More than 70% of poor households live in rural areas. Farming is their main source of food and income, but agricultural productivity is very low. Farmers and fishers generally make enough to meet their households' basic food requirements, with perhaps a little surplus for sale. Incomes from both farming and fishing are meagre and most of the rural population survives at subsistence level. Rural communities are extremely vulnerable to natural disasters such as droughts and floods, which recur particularly in the southern and central areas of the country.

2. The coastal communities, which suffer extreme isolation, are the poorest areas in the country. Poverty is caused by isolation, inadequate infrastructure and the consequent lack of access to goods and services. In rural Mozambique the road network is in poor condition and basic services are inadequate.

3. Produce markets are distant, unreliable and uncompetitive. Alternative sources of income outside agriculture are very few, and this increases the vulnerability of poor rural people to natural disasters. In times of scarcity they have little to buffer them from food insecurity. Both the civil war and floods and drought forced many displaced persons to migrate to urban and coastal areas.

B. IFAD Strategy

4. A Country Strategic Opportunities Programme (COSOP) approved in 2011 sets out a framework for the partnership between IFAD and the Government of Mozambique for the years 2011 to 2015. The COSOP builds on IFAD's experience in Mozambique and lessons learned from past operations in the country, particularly notable successes achieved in:

- creating market linkages between small-scale producers and buyers
- facilitating the introduction of new technologies and services for fishing communities
- setting up savings and credit groups across the country
- rehabilitating rural roads for better access to markets and services; and
- introducing important policy and legislative changes, such as the protection of artisanal fishing.

5. IFAD continues its strategic focus on supporting smallholder farmers and artisanal fishers. Its main target group are poor producers with the potential to expand and commercialise their activities, and special emphasis is placed on integrating disadvantaged groups, particularly women and young people.

6. IFAD's overriding goal in Mozambique is to help integrate small-scale producers into profitable and accessible markets. To achieve this, it pursues three strategic objectives:

- Improving the access of smallholder farmers and artisanal fishers to technologies and services that increase productivity.

- Increasing access to, and participation in, markets for an equitable share of profits. IFAD helps develop economic infrastructure for the conservation, processing and marketing of produce; and
- Increasing the access to sustainable financial services in rural areas.

C. The Project Context

7. The Artisanal Fisheries Promotion Project (ProPESCA) builds on the experience of three artisanal fisheries projects implemented along the Mozambican coast, including the closed Sofala Bank Artisanal Fisheries Project (PPABAS), also financed by IFAD.

8. The project's goal is to improve incomes and livelihoods for artisanal fishers and their communities. To do this, the project works to boost fishing productivity and subsequent sales sustainably, by increasing the quantity and more importantly the value of the catch and by improving all links in the value chain, right up to the market place. Implementation focuses on four investment components:

- supporting the development of higher value fish
- improving market infrastructure
- developing financial services; and
- institutional strengthening, and promotion of policy initiatives

9. The project area stretches along the whole Mozambican coastline. It focuses, however, on key growth poles, each comprising a major fishing centre plus a number of centres linked to the major centre up and down the coast or on adjacent islands. These growth poles have strong potential for expanding and intensifying fishing and fish marketing operations.

10. Wealth generated through small-scale fishing and other fishing related activities is an important factor in rural economies. Even the so-called subsistence and semi-subsistence fishers sell a considerable share of their harvest to local traders. Hence, removing the obstacles that constrain the functioning of the fisheries value chain is expected to have a significant impact on the project's target group and on poverty reduction.

II. ISSUE: FISH CONSERVATION

A. Issue

11. Fish caught in remote locations is usually sold in larger centres a few hours' drive away. In order for the fish to be still fresh at the time of sale, it needs to be transported to market as soon as it is brought to shore. Transport is arranged by resellers who buy the fish from the fishermen and take it to market. As these resellers are the only buyers around, they are able to impose harsh prices and conditions on the fishermen, rejecting fish unless it is absolutely fresh and paying low prices as they are the only buyers at the port. Additionally, trucks are often unreliable, preventing the fishermen from planning their activity around pickup periods.

12. In addition, fishing is usually done close to the shore in order to be able to deliver the fish fresh to the traders. As such, the waters close to fishing centers are relatively overfished, while waters further away have plenty of fish. Without ice on board, the fisherfolk cannot reach these locations.

B. Mitigating measures

13. Facilitating fish conservation on board and from the moment it is landed would enable the fishermen to work more effectively, decrease the pressure on nearby waters, waste less fish and make fresher fish available for delivery. The increased quality and quantity of the catch would also enable them to negotiate better prices and conditions, as the threat of the fish becoming unusable within a short period of time is reduced.

14. A Solar Ice Maker is available on the market and has been tested in the field, including on a project in Kenya managed by the World Bank and Heifer International. Under optimal conditions, one Ice Maker makes 50 kg of ice every 24 hours. The ice may then be used to conserve the fish. The section below illustrates the principles behind the Ice Maker's operation.

Figure 1 - Three Solar Ice Makers producing ice for smallholder dairy farms in Kenya



Figure 2 - Technical overview, Day mode

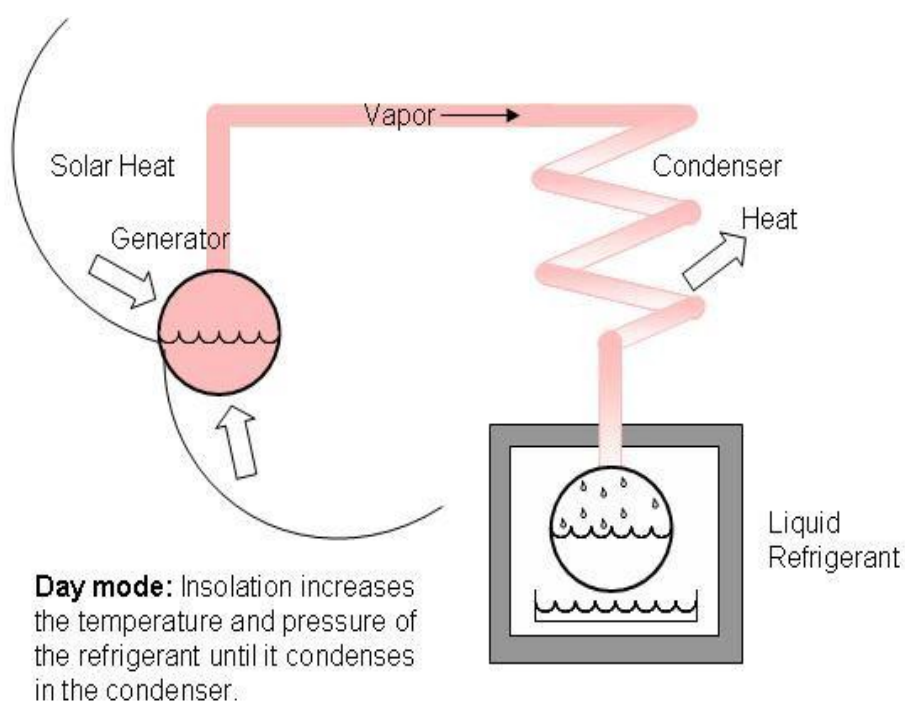
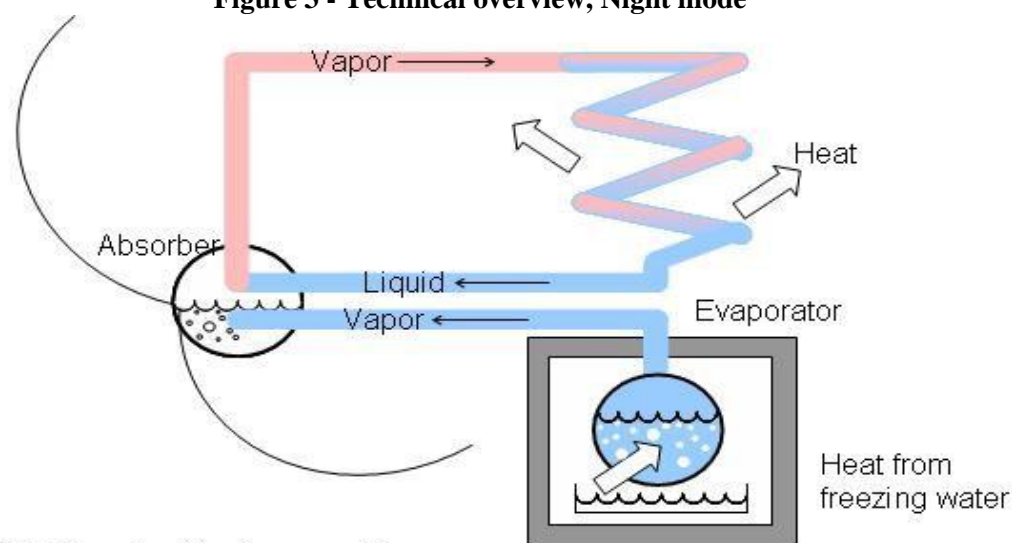


Figure 3 - Technical overview, Night mode



Night mode: Heat removal via thermosyphon decreases absorber pressure, allowing refrigerant to be reabsorbed. As the refrigerant evaporates, the water freezes.

15. A solar ice maker uses the same principle as a fridge, albeit in a non-continuous way (working on a 24-hour cycle, heating up during the day and cooling the water until it freezes at night). The main working fluid is a mixture of water and ammonia, present in the generator (a metal tube towards which the sun's rays are reflected by mirrors). The ammonia evaporates during the day and moves through the tube until it passes through a condenser, where it cools down and collects as a liquid again in a container, which is immersed in another container which holds water.

16. Once night falls, temperatures drop, reducing the pressure in the tube. The ammonia evaporates out of its container and moves back towards the generator. In doing so, it removes heat from the water surrounding its container. The water's temperature decreases below 0°C and it turns to ice, ready to be collected the next day.

C. Practical aspects

Table 1: Average weather data for Mozambique³

Month	Average Temperature (°C)	Wet Days (>0.1 mm)	Average Sunlight Hours/ Day
January	26	9	7,2
February	26	8	7,4
March	26	9	7,3
April	24	6	7,6
May	22	3	8,2
June	20	2	8,2
July	20	2	8,3
August	20,5	2	8,1
September	22	4	7,6
October	23	6	6,8
November	24	8	6,6
December	25,5	8	7,1

It can be seen that, in general, the coldest months are also the ones with least rain and most sunshine.

³ Source: <http://www.climatetemp.info/mozambique/>

Financial analysis

17. A financial analysis relative to one machine is presented below.

Table 2: Setup Costs

Item	Cost (USD)
Ice maker	15.000
Transport	6.000
Assembly + training	10.300
Additional components	1.125
Technical Assistance	5.900
Subtotal	38.325
Possible subsidy	50%
Total setup costs minus Subsidy	19.162,5

18. The costs relative to acquiring the ice maker, transport and setup are given based on ongoing discussion with the Solar Ice Company, the sole supplier. The amount of 50% for the possible subsidy is a tentative hypothesis and may vary (see table 6 for a possible approach to phased grant support).

Table 3: Recurrent costs

Item	Cost (USD / year)
Staff (assuming 1 person in community / machine)	150
Spare parts	100
Water	0
Ammonia	150
Total	400

19. The staff costs are also dependent upon the structure of the enterprise currently expected to follow a single-owner model – a local businessman - , employing local workforce for its operation) and the ice-making activity's integration within the enterprise's current business. If a local businessman cannot be found, local personnel requiring considerable additional training and support may have to be involved. The selection of stakeholders to be involved will be a participatory process including supplier, project staff, and the community, as detailed above. The cost of water and ammonia will be determined by their quality and availability at the site.

Table 4: Basic Ice Making Parameters

Item	Amount
Expected life	25 years
Daily amount of ice made (kg)	50
Amount of ice made over life (kg)	450.000 (30 days x 12 mo x 25 y)
Ideal price of solar ice (per kg)	USD 0.21 (= MZM 6)
Estimated proportion of ice sold	Gradually increasing to 100% over 4 years
Amount of ice sold over life (kg)	423.000
Production price of ice (per kg)	USD 0.011 (=MZM 0.30)
Shadow price of ice (other supplier) (per kg)	USD 0.32 (= MZM 9)

20. It has been estimated that after an initial 4-year period where demand will gradually increase, all of the ice made will be sold over the 25 years of the ice maker's life, given the considerable scope for using increasing volumes of ice by the fishermen, when available. The table below also takes into account a gradual increase in volume of ice sold over the first four years.

Table 5: Feasibility Analysis, Solar Ice Maker

Ice monthly Production	kg	1500	MZM/USD =	28,5				
Yearly production	kg	18000						
Ammonia replacement - yearly requirement	kg	16						
Item	Unit	Unit Cost MZM	Without Project	With Project				
				Y1	Y2	Y3	Y4	Y5-25
Main Service								
Production of ice	kg	6		4.500	9.000	13.500	18.000	18.000
Inputs								
<i>Investments</i>								
Solar Ice Maker	unit	427.500		1				
Transport - International		142.500		1				
Transport - Import Taxes		-		1				
Transport - In-country		28.500		1				
Setup - materials		8.550		1				
Setup - implementation + training + follow-up		285.000		1				
Spare parts + tools		32.063		1				
SIC personnel trips		24.938		4				
SIC personnel weekly allowance		5.700		12				
<i>Operating</i>								
Parts + maintenance	MZM/year	2.850		1	1	1	1	1
Water		-		-	-	-	-	-
Ammonia	kg	267		16	16	16	16	16
<i>Labour</i>	MZM/month	356		12	12	12	12	12

Financial Budget (MZN)

	Without Project	With Project				
		Y1	Y2	Y3	Y4	Y5-25
Revenue						
Sale of ice		27.009	54.019	81.028	108.038	108.038
Sub-total Revenues		27.009	54.019	81.028	108.038	108.038
Inputs						
Investments		1.092.263				
Operating						
Parts + maintenance		2.850	2.850	2.850	2.850	2.850
Water		-	-	-	-	-
Ammonia		4.275	4.275	4.275	4.275	4.275
Labour		4.275	4.275	4.275	4.275	4.275
Sub-total Operating Costs		11.400	11.400	11.400	11.400	11.400
Total Costs		1.103.663	11.400	11.400	11.400	11.400
Gross Income		- 1.076.653	42.619	69.628	96.638	96.638
Incremental Net Income (before Financing)		- 1.076.653	42.619	69.628	96.638	96.638
NPV @10% (MZN) - 254.379,19						
IRR 7%						
Benefit/Cost Ratio 1,84						
Total production cost per 1kg ice 0,307						

At the conditions given above, it can be seen that the production price of ice is below the estimated shadow price of MZN 6. This would result in an internal rate of return of 7%.

Assumptions

21. The tables above assume a gradual increase in ice sales peaking at 100% of production in the fourth year, and staying high due to high market need.

22. The operating costs will have to be confirmed by the pilot test, as it is possible that there may be variance in price of ammonia (there may be no need to replace 25% each year), price of labour (the current analysis assumes one person contracted to operate the machine, requiring at the most 4 hours/day), and water (assumed available for free on location).

23. Over the machine's life of 25 years (as given by the supplier) the expenses due to maintenance may fluctuate depending on the nature of the works and materials required. The shadow price of 6 MZM also depends on the location in which the machine is operating. It is possible that in very remote areas this may actually be higher, making the operation of the machine more profitable than shown above.

Investment feasibility and support

24. The above tables show that for an initial investment of about MZM 1.1 million, once operation reaches full capacity (from year 4 onwards), annual gross revenue achieves almost MZM 110.000, or 10% of the initial investment. Once operating costs of MZM 11.400 are deducted from this, Net Income at full operating capacity reaches just under MZM 100.000 per year. Hence, if the estimates are accurate, the machine would have to be operated for roughly 15 years in order to recover the initial investment.

25. In order to make the investment more attractive, during the initial phase where this technology is being introduced to the country, the project may consider subsidizing a number of machines through grants, to favour early adopters. This would enable local operators to acquire machines at a low investment cost and be able to foresee recovering the initial investment in much shorter time periods and thus making it much more attractive.

26. It is proposed to structure the approach to investment support according to the project phases: early adopters will receive almost total support through grants from the project, which will gradually decrease in value as the technology becomes more popular. In table 6 below is a rough outline of costs associated with this approach.

27. The uptake in phases III and IV will depend upon the success of the pilot (phases I and II), and the awareness raised by the project with potential local entrepreneurs. Awareness raising activities should include documenting activities and results, disseminating these in project areas which may benefit from the use of these machines, identifying possible interested community members and conducting field visits to demonstrate operation and benefits to interested parties.

Table 6: Project support for Investment in Ice Makers

	Pilot: phase I (ice making test) + II (field test)	Phase III	Total (Pilot + phase III)	Phase IV	Total (Pilot + phases III and IV)
Number of machines	1	Up to 10	Up to 11	Up to 30	Up to 41
Grant subsidy	100%	80%		50%	
Cost of each grant (USD)	38.325	Up to 30.660		Up to 19.162,5	
Total cost of phase (USD)	38.325	Up to 306.600	Up to 344.925	Up to 574.875	Up to 919.800

D. Operation & Maintenance

Capacity Building

28. Training personnel to operate the ice maker is essential and should be included in the set-up costs. The training conducted will cover two areas: (i) technical training, provided by the service provider to at least two operators of the machine (to account for contingencies), the manager, and interested private and public sector parties; and (ii) financial training, provided to the manager via a different service provider contracted by the project.

29. The supplier is to train a local service provider (person or company) to conduct regular more sophisticated maintenance that may not be carried out by the operators.

30. Financial training will include basic business processes required to ensure forward contingency planning with regards to the financial implications of carrying out O&M, including setting aside a proportion of profits made from the sale of ice to be used for O&M.

Operation

31. The system comprises: (i) a generator, where the working fluid is heated; (ii) a condenser, where the working vapor condenses into a liquid during the day, and then flows into (iii) the evaporator, where the working fluid is stored in liquid form during the day and from which it evaporates at night. These are connected by circuits to allow flow of this fluid around the system, regulated by valves. Each day before sunset, the operator will fill up the water container, close the “vapor valve” (regulating the flow of working fluid from the generator to the condenser) and open the “evaporator valve” (allowing the working fluid to evaporate out through the water container). Also, they will open a third valve, the “thermosyphon valve”, which enables the cooling of the generator at night. At sunrise, the operator will invert all three valves: close the evaporator and thermosyphon valves, and open the vapor valve. The ice will be removed to be stored or sold. The cycle can then start anew. It is recommended that the water container be refilled as late as possible in the evening.

Record keeping

32. Having been provided with financial training, the manager will keep records documenting activities and associated financial aspects. They will record volumes of ice made and sold, expenses and income, and notes on the weather. They will be required to provide quarterly reports to the project.

Maintenance

33. It is suggested that an illustrated manual be designed by – or in collaboration with – the supplier, explaining maintenance procedures to be followed according to the most common scenarios or in the case of external assistance. General maintenance includes cleaning the mirrors and tube monthly to make sure the dust does not reduce the equipment’s effectiveness. More significant tasks, to be conducted by the above mentioned service provider, include the replacement of the valves every five years. The valves are provided by the supplier, which should be contacted at the appropriate time.

34. In the case of slow, gradual leakage – e.g. due to a small hole in the tube – the main consequence would be the need to contract a local company to fix the tube and replace the ammonia. As it is lighter than air, upon exiting the ice maker it would dissipate in the atmosphere.

Personal Safety

35. Under specific circumstances, exposure to ammonia may have serious consequences for humans and animals. In case of a sudden, violent leak (due to a strong impact, such as a person or animal hitting the machine) from the ice maker, the exposure to such a large amount may cause irritation to the respiratory tract, irritation of the nose and mouth and in severe cases even blindness. Children are more vulnerable than adults. For this reason, the ice maker must be protected from the possibility of sudden impacts or manipulation by untrained staff. The machine is expected to reach

very high temperatures during the day, which poses a health hazard. In view of the above, fencing is an absolute requirement.

E. Sources

36. The text in Section I: Introduction has been taken from the IFAD website and available IFAD-released documents, edited to include only those parts deemed relevant to provide context for this paper. Other sources are as indicated

Document	Source
A solar energy resources assessment in Mozambique	http://www.erc.uct.ac.za/jesa/volume17/17-4jesa-cuamba.pdf
Rural Milk Preservation with the ISAAC Solar Icemaker – project implemented in Kenya by World Bank and Heifer International	http://siteresources.worldbank.org/DEVMARKETPLACE/Resources/205097-1128108124421/Rural_Milk_Preservation_Paper.pdf
Mozambique Temperature and Sunlight information	http://www.climatetemp.info/mozambique/

Appendix 3: Financial Services

I. INTRODUCTION

1. IFAD's support to financial services in artisanal fisheries communities started under the Nampula Artisanal Fisheries Project (NAFP), implemented in 1994-2001. NAFP supported two activities in financial services. First, it provided support to the introduction of savings and credit groups to villages at the coast, where no such activities had been practiced before. Second, it used a publicly owned development fund FFPI to provide working capital credits and small investment loans to finance fishing-related investments.
2. The next IFAD-supported investment in the sector was the recently closed Sofala Bank Artisanal Fisheries Development Project (PPABAS), which became effective in 2002 and was closed earlier this year. It continued with basically the same financial service activities as NAFP, further developing them and expanding the implementation area from Nampula Province to Sofala and Zambezia Provinces.
3. Based on PPABAS success, government and IFAD agreed to continue supporting the development of artisanal fisheries in Mozambique to the benefit of poor communities whose livelihoods depend upon fishing. The Artisanal Fisheries Support Project (ProPESCA) became operational in late 2011. Its core strategy is based on four key elements: (i) focus on growth poles – centres where there is a coincidence of conditions that combine to give a comparative advantage in concentrating fishing activities and fish marketing operations; (ii) diversification of fishing operations based on value addition through use of ice, with the associated implications on the value chain; (iii) optimization of the value chain for higher value fish, from catch to the final market, through a range of technical, financial and institutional interventions; and (iv) emphasis on social inclusion, both in poverty and gender terms, in all project interventions. The seven-year project will come to an end in 2018.
4. This Appendix documents the main observations of the mission and the agreements reached to help the start-up of the various operations included in the Developing Financial Services component of ProPESCA. The component, with a total value of USD 8.7 million, provides a comprehensive support package to various kinds of rural finance activities in the artisanal fishing communities.

II. THE STRUCTURE OF FINANCIAL SERVICES COMPONENT

5. The component consists of two operational sub-components and a support sub-component. Under the support sub-component, financing (USD 0.4 million) is provided for the recruitment of both long-term and short-term experts to support the operations of the two other sub-components.
6. The first operational sub-component (Community-Based Financial Services) continues the successful work of the two earlier projects in the establishment and development of Accumulating Savings and Credit Associations (ASCAs, in Mozambique called PCRs) in the fishing communities. Under ProPESCA, a total of USD 2.8 million has been allocated to intensify and further develop the community-based operations in these communities. The sub-component includes:
 - Establishment of New ASCAs
 - Capacity Building of Service Providers
 - Development of the ASCA Methodology
 - Support to Formal CBFS Providers
 - Provision of BDS Services and Literacy Programmes to ASCA Groups.
7. The second operational sub-component (Financial Support to Value Chain Investments) covers ProPESCA financing to a total value of USD 5.5 million. It consists of:
 - Support to Attract Financial Institutions to Fishing Areas
 - Risk Mitigation Fund

- Matching Grants for Innovation and Infant Industry
- Innovation Fund for Women's Enterprises
- Specialised Business Development Services.

III. PLANS FOR 2012 AND OVERALL PROGRESS

8. The 2012 AWPB allocation for the whole component was USD 641,000, correctly reflecting the plans agreed on in late 2011. For the AWPB for 2013, it is very important that all the changes agreed in this Aide Memoire are fully reflected in next year's activity plan and budget allocations.

9. By the time of the Mission, no funds under Component 3 have yet been spent. This is largely due to the fact that IDPPE/ProPESCA has very little in-house capacity in rural finance, and the main responsibility in component implementation was to be with the externally recruited TA. However, the recruitment of the long-term Rural Finance Specialist (RFS) has faced serious delays. The main reason for these delays is reported to be the bureaucratic process in the recruitment of foreign TA. It is now assumed that the successful candidate will start in ProPESCA in October 2012, some six months later than planned. With this delay, practically all Component 3 activities still remain to become operational.

10. In this overall situation, the main tasks for this Mission on rural finance became forward-looking: to assess whether the proposed interventions still fit the current implementation environment, to propose changes in activities when needed and to support ProPESCA in making the component operational without further delays. Agreements reached in these areas are briefly recorded below.

IV. ASCAs AND OTHER COMMUNITY-BASED FINANCIAL SERVICES

11. The core target of this sub-component is to substantially increase the number of women and men participating in community-based financial arrangements around ProPESCA Growth Poles. At the same time, focused efforts would be made to improve the methods used in PCR promotion and to actively link the groups and their members to formal MFIs and other financial institutions.

12. **Establishment of New ASCAs.** The ProPESCA strategy for the establishment of new ASCAs was to use experienced ASCA promoters to train new ASCA promoters so that this activity could effectively be implemented in all ProPESCA provinces. This ASCA promoter training was planned to take the whole first year of the project period, to be followed by a request for bids by ASCA promoters to start the actual field operations. It, however, appears that today, a larger than expected number of competent ASCA promoters operate in the country and are willing to bid for operations around the ProPESCA Growth Poles. This includes areas such as Gabo Delgado, which were outside the PPABAS activity and have very few ASCAs in the fisheries areas. In this situation and to avoid any further implementation delays it was agreed:

- The RFS will, by mid-November 2012, conduct a mapping of competent and interested ASCA operators in all coastal provinces
- In provinces with an adequate number of such promoters, the PCU will during the first quarter of 2013 call for bids to establish ASCAs around the Growth Poles
- ProPESCA will organise ASCA promoter training only in those provinces where this is required to reach the project targets; this potential training would be conducted in the first half of 2013, followed by a request for bids to the trained ASCA operators to work in the ProPESCA villages. Budgets for this whole activity in the AWPB 2013 will be based on the above approach.

13. **Development of the ASCA Approach.** The target to develop the ASCA method still remains very valid. This covers both the way the ASCAs themselves operate in savings and credit and the manner they can be connected to the more formal financial market. It was agreed that as one of his first tasks, the RFS will draft the TOR for a 3-month international consultant to develop the ASCA approach in fisheries communities, with a target of having this consultant operational by February-March 2013. After a diagnostic study, this short-term consultant is expected to make proposals on

how to make the ASCAs more investment-oriented in their operations, for instance by retaining funds after each cycle to reach higher lending levels or by directly investing the funds at the end of each cycle in business activities. Further, the proposals should include the ways of how to link the mature ASCAs to SACCOs, formal village banks and MFIs, of which operations there are various experiences emerging in Mozambique and elsewhere in the region. The recommendations by the short-term consultant should be practical and implementable in the fisheries environment. ProPESCA has the funds to later implement these improved ASCA methods among the ASCAs in the coastal communities.

14. **Business Development Services (BDS).** In the ProPESCA design, BDS were seen as critical complementary components to financial services for improving the entrepreneurial capacity of the economic actors at the lower end of the artisanal fishing chain. The findings of this Mission again confirmed this assumption: moving to the more advanced stages of economic activities requires new skills and often also changes in the mindset. A good example of the latter case was observed in a well organised ASCA-based women's marketing group in Moma. Their key future plan included an investment in the freezing capacity through the procurement of additional deep freezers. The group indicated that they were trying to identify grant or credit funds for this investment, so far without a success. At the same time the group has recently closed its latest ASCA cycle, with each of the 27 members receiving some MZM 5,000 to MZM 7,000 in cash. By investing only MZM 1,000 each in the new freezers, they would have doubled their freezing capacity. By investing MZM 3,000 each (or about half of the ASCA split funds), they would become one of the leading fish trading operations in Moma, with modern facilities. These investments could then of course be a source of much higher future incomes for the whole marketing group. Similar observations from other groups clearly indicated that there is much room in developing the ASCA operations to a more business- and investment-oriented direction with appropriate training activities.

15. It was agreed that ProPESCA will develop a systematic approach for its BDS operations, applicable to all types of ProPESCA activities. The key responsibility in this design work will be with the RFS and the Value Chain Specialist, together with the Project Coordinator. The first step in this activity is to map the potential providers of these services in the country. An approach using multiple service providers may be advisable because of the differences in the tasks involved in different activities and the geographic realities of the fisheries sector. The basic element to build on was agreed to be a substantial BDS module to be included in the approach of each ASCA promoter. For the more advanced services, appropriate private service providers are expected to be available for BDS operations at the Growth Poles.

V. FINANCIAL SERVICES FOR FISHERIES VALUE CHAIN

16. **Efforts to Attract Financial Institutions to Growth Poles.** The general lack of registered financial institutions in or close to the Growth Poles continues to be a serious bottleneck for economic development. Two separate ProPESCA allocations were planned to respond to this situation using relatively similar approaches: Support to Formal CBSPs (USD 600,000) under sub-component 1 and support through FARE/IOF (USD 800,000). Both activities were planned to attract banks, microbanks and MFIs to the Growth Poles using matching grants, preferably combined with line of credit funds.

17. There has been no progress in the first option, particularly as the recruitment of the RFS is delayed. Concerning FARE/IOF, a draft MoU for the ProPESCA/FARE co-operation was developed in early 2012. This, however, was never signed. During the April 2012 Implementation Support Mission of PAFIR, it was agreed that "ProPESCA will continue negotiations with FARE only when FARE's liquidity situation improves to a level, in which FARE would be able to fulfil its credit line commitments to ProPESCA".

18. A follow-up mission to PAFIR was organised in late September 2012, after the ProPESCA Supervision Mission. This PAFIR mission assessed the situation in FARE concerning the liquidity situation of the Innovation and Outreach Fund (IOF) as well as its management and operational performance. One conclusion of the mission was that with the successful implementation of the action plan developed by FARE, it can be possible to remove the over-commitment in the credit line of the

IOF. This would mean that the lending from the reflows of the currently outstanding loans could resume, possibly in late 2012 or early 2013. If this situation can be reached, FARE could be in a position to provide the loan funds that would be needed by the financial institutions which would benefit from the ProPESCA matching grants to establish their operations in the Growth Poles.

19. As the entry of new financial institutions to Growth Poles is crucial for the ProPESCA investment operations, the PCU has started to plan for alternative options to reach the agreed development results in this area. A preliminary allocation of the new EU-MDG funds includes USD 1.9 million for a credit line for those financial institutions that operate in or near the Growth Poles and are willing to finance fisheries value chain investments. This, together with the above indicated USD 1.4 million available for matching grants, constitutes a substantial resource, the use of which needs to be carefully planned.

20. It was agreed that the PCU and especially the RFS follow up the situation concerning the potential ways of how to implement this support activity, with the target of finding the best institutional arrangement by the first quarter of 2013. If a functional solution is found, it will be important that the RFS and ProPESCA management actively inform the financial institutions about these support services and the potential investment opportunities that MFIs, microbanks and commercial banks have in and around the fisheries Growth Poles.

21. **Risk Mitigation Fund.** As a part of sub-component 2, the ProPESCA allocation (USD 600,000) to the Risk Mitigation Fund (RMF) operation follows an investment made under PPABAS during the latter years of its implementation. The RMF was established in GAPI. PPABAS invested USD 250,000 in this fund, GAPI USD 150,000, making a total USD 400,000. GAPI and an interested bank or MFI were then to identify crucial investments that need financing in the fisheries value chain. The bank or MFI was to finance a part of the investment from its own funds at its own interest rates and other terms. The RMF was then, with a separate loan managed as an off-balance-sheet item by GAPI, to finance the remaining part of the investment, with whatever collateral would be remaining for this RMF loan. This risk mitigation arrangement was expected to attract new banks and MFIs to finance investments in key fishing centres.

22. The RMF operations have progressed slowly. The Subsidiary Loan Agreement (SLA) between GAPI and the Ministry of Finance was signed just before PPABAS was closed. Even with the RMF, it has been difficult to find banks or MFIs to invest in the artisanal fisheries sector. In this situation, GAPI started to finance fisheries operations from its own funds covering 50% of the loan amount, the remaining 50% coming from the RMF. In 2012, ten such loans have been issued to the total value of USD 48,517. All of them were for projects in Zambezia and Sofala Provinces. Another 25 loans are currently under different stages of processing, with a total value of USD 208,609, now also covering operations in Nampula Province.

23. The approved and disbursed loans are for fish marketing and basic fishing gear, while the new applicants aim to borrow more for more expensive fishing gear, including some 10 applications for boats and outboard engines. With this current arrangement, GAPI takes about 70% of the risk of the loans. If another bank were to get involved, GAPI's maximum share of the risk would be around 19%. Clearly, GAPI, the PCU and the Mission all recognise that the current arrangement is not ideal and does not fully serve the intended purposes. At the same time, some new financing has been introduced to fishing communities.

24. The Mission discussed the RMF issue in detail with the management of GAPI. In these discussions, the following arrangements were agreed on:

- Marketing meetings will be organised in key Growth Poles in the next three months jointly by GAPI and the PCU particularly for financial institutions to demonstrate to banks, microbanks and MFIs that low-risk investment options exist when operating with the RMF support.
- The Regulations on the RMF operations will be signed between ProPESCA and GAPI. To progress in this area, the Banking Expert of the Mission and the Project

Coordinator up-dated and finalised these Regulations. It is expected that they would be signed and become operational before the end of September 2012.

- Following the Regulations, the RMF Management Committee will be established, consisting of representatives of the PCU, GAPI and FFP, to meet quarterly especially to assess the eligibility of the loans approved with the RMF support and to verify the financial statements of the RMF funds.
- As agreed earlier, a joint evaluation by the PCU and GAPI of the RMF operations will be conducted in July-September 2013. Based on the outcome of this evaluation, the future of the RMF will be decided on, including the use of the USD 600,000 allocated for the purpose in the ProPESCA cost estimates.

25. **ProPESCA Matching Grants.** Finally, the sub-component 2 includes two matching grant operations. First, innovation and infant industry grants would be available for such investments that cannot find financing but are critical to the value chain. The maximum grant would be USD 50,000. However, according to IDPPE, very few such large key investments emerged from the first Growth Pole strategies, while there appears to be justifiable grant demand in the lower range of USD 2,000 to USD 5,000. Second, there is an allocation for matching grants for women's economic activities of USD 50 to USD 1,000, particularly for women active in ASCA and association activities.

26. Both these matching grant operations are only vaguely defined in the Design Document, concerning their purpose, eligibility criteria and actual operational procedures. In the view of the Mission, their utilisation should be limited to three types of projects: (i) operations that can be used for wider demonstration purposes, (ii) operations by clearly unprivileged groups or individuals or people serving these unprivileged groups, and (iii) key value chain operations in which the lack of availability of finance can be clearly demonstrated. It was agreed that the RFS and the Value Chain Specialist design a draft proposal on how the two matching grant schemes would operate, with detailed eligibility criteria and other terms and conditions. Concerning the processing of such potential matching grants, the provincial IDPPE would be the appropriate body to process and approve the grants, operating within the guidance of clear scheme rules and under the supervision of the management of ProPESCA/IDPPE.

VI. OTHER RELATED ISSUES

27. The Rural Finance Expert on the mission also actively participated in the review and forward planning of two critical issues that directly affect the rural finance operations in fishing communities. The first one concerns the fishing input supply in the Growth Poles. During the two previous fisheries programmes, problems in the supply of fishing equipment have been successfully solved through active co-operation between IDPPE and the leading input supply companies in the private sector. Now that ProPESCA covers the whole coast line, it was agreed that the same partnership approach will be applied also in the Growth Poles in the north and in the south. The visited input suppliers indicated their interest to expand their operations into new fishing communities, if adequate demand for fishing inputs can be demonstrated.

28. The second issue concerns the way the marketing of fish has been organised in coastal communities. The necessary methodological review was carried out in late 2011 under PROPAPA and a well-researched operational plan for markets was developed, based on transfer of the fish market facilities to the local authorities, for example with ice making tendered out to the private sector and market management committees (comprising traders and fishers). Unfortunately there is little evidence of fish markets operating effectively. This is mainly due to neglect by the local authorities, issues about how the market revenues should be managed and to some extent the capacity of the management committees to perform their designated functions. Clearly there is still a need to review the current management structure between the district authorities and the management committees at the first-point of sale and municipal markets. The mission discussed these issues with the IDPPE staff, with the aim of reaching a more private sector-based arrangement to operate the markets more effectively in and around the Growth Poles. Success in this area is a prerequisite for increasing the fishers' incomes on a sustainable basis. For the success of future financing operations in the fishing

communities in the ProPESCA area, the successful solving of the problems in fish marketing is of as critical importance.

VII. SUMMARY OF AGREED KEY ACTIONS

29. The Table below lists the agreed actions under the Financial Services Component. These will form the core of the activity plan for the component in 2013 and guide the allocation of funds for each activity.

Agreed action – Component 3	Responsibility	Agreed date
41. Design a detailed activity and financing plan for Component for 2013	PCU, RFS	December 2012
42. Conduct mapping of ASCA promoters in all provinces	RFS	Mid-November 2012
43. Launch bids for ASCA promotion	PCU, RFS	By March 2013
44. Train ASCA promoters where needed	RFS, Level 1 promoters	January-June 2013
45. Design TORs, recruit s-t TA for ASCA+	RFS, PCU	By March 2013
46. Define ProPESCA approach for advanced ASCA promotion	S-t TA, RFS, PCU	By June 2013
47. Design and implement BDS approach for ProPESCA	RFS, Value Chain Expert, PCU	Design by June 2013, then continuous
48. Decide on ProPESCA approach to attract FIs to Growth Poles	RFS, PCU	March 2013, then continuous
49. Finalise Regulation on the RMF, activate Management Committee	GAPI/PCU/RFS	By October 2012, then continuous
50. Organise provincial RMF promotion meetings	GAPI/IDPPE	October-December 2012
51. Organise evaluation of the RMF	GAPI/PCU, external consultant	July-September 2013
52. Design rules for two matching grant operations and implement schemes	RFS, Value Chain Expert, PCU	Rules by March 2013, then continuous

Appendix 4: CHAPANI - Coastal HIV/AIDS and Nutrition Improvement

I. Introduction and Background

1. The three-year Coastal HIV/Aids Prevention and Nutrition Improvement Project (CHAPANI) is an EUR 500,000 Grant covering the six growth poles of Angoche, Memba, Larde, Moma, Nacala Porto and Ilha de Mocambique. It thus overlaps fully with the ProPESCA areas in the province of Nampula. Its development objective is to reduce HIV/AIDS prevalence and malnutrition by mobilizing people in the fishing communities to: (i) increase their knowledge and change risky sexual behavior; and (ii) diversify their regular diet. CHAPANI targets three categories of stakeholders in the fishing communities: (i) fishers; (ii) processors/traders; and, (iii) providers of support services. Special attention will be given to reach out to women within the target group among the fishing families.

2. Given the short period since the effective start of CHAPANI in July 2012, the main focus of the mission has been on: (i) revisiting the AWPB and any needed adjustments; and (ii) proposing priority setting for the proposed activities since there was a slight delay in the project effective start initially scheduled for April.

II. Implementation arrangements and progress

3. The implementation of CHAPANI activities has been assigned to the Associação Moçambicana Ajuda de Povo para Povo (ADPP) and the Director of ADPP has the overall responsibility for the project, while the day-to-day implementation has been delegated to a Project Coordinator based in Nampula. The Project Coordinator will ensure that work is done in close collaboration with IDPPE at every level (national, provincial, district and local) and that implementation is jointly planned. While at national level ADPP will be a member of the ProPESCA Reference Group, at provincial level it will take part in ProPESCA's Consultative and Coordination Group. Planning, monitoring and the implementation of activities is mainly coordinated with the IDPPE Delegation in Nampula, which has its main office in Angoche. This arrangement by which a specialized agency is assigned the responsibility of implementation of CHAPANI, aims to ensure that ProPESCA management and staff give focus to its major activities envisaged in the Project document, while ADPP will concentrate attention to these HIV/Aids and Nutrition activities and link them to ProPESCA within the above mentioned GPs. Overall, close collaboration will be sought with the ProPESCA M&E officers in order to ensure that the information gathered is mutually reinforcing and well informed decisions can be made.

4. In June 2012, ADPP submitted the CHAPANI AWPB for the first year for IFAD approval. The proposed activities in the AWPB are fully in line with the project grant document, in particular with the two components of the project and the sequencing is also in a logical manner. The plan seemed ambitious but implementable given that proposed activities will be carried out in the 6 GPs situated near each other, and given the CHAPANI coordination team's base in Nampula. Furthermore, the proximity will facilitate the implementation in the field and help establish the necessary local links with the IDPPE/ProPESCA delegation in Angoche.

5. The implementation of the HIV/Aids Prevention component has started well. The initial activities consist of preparing a Household Register (HHR) which will comprise every household in the target area and include the following data: number of people reached, people tested on HIV/AIDS and knowing their results, women mobilized for Prevention from Mother to Child Transmission (PMTCT), and volunteers involved to be used by the FOs and the supervisors to control the quality of the work and results achieved. The mission was able to meet the ADPP team in Monapo district and was impressed with its knowledge, its familiarity with the project and its tight structure, including the organized approach for carrying out its field assignments.

III. Adequacy of the planned activities and targets for the nutrition component

6. During the mission and through meetings with fishing associations, microcredit clients and processors it was possible to understand the prevalence of some problems related to attitude change and risky sexual behavior in relation to HIV/ AIDS. This further confirms the need and relevance of CHAPANI which addresses two important but complimentary components in the target area. Good nutrition requires also that good hygienic conditions are strictly observed. As such, it was agreed that ADPP will include in its activities the awareness raising on food conservation and hygiene.

7. In addition to that, and since the GP planning exercise did not produce much data that would support the planning of the nutrition component of CHAPANI, the points below will need to be taken into consideration for the baseline survey and during the planning process for the component, to be coordinated with the district health authorities. These are:

- Fish conservation without strict observations of some basic hygienic practices;
- No food diversification by a large part of the households in the project area; and
- Pre-mature marriages of young girls who become mothers at very young stage.

8. The baseline survey to be finalized in early 2013 will be instrumental to assist in measuring the impact later. In addition to that, it is recommended that CHAPANI activities be implemented in coordination with health authorities, local authorities and other NGOs promoting similar initiatives in the field.

IV. CHAPANI target group, and its expected overlap with the ProPESCA target group

9. The Nutrition component will start during the second year of project implementation. This makes sense considering that the HIV component, which has already started, will help to identify beneficiaries in the project area that would also require priority assistance under nutrition. This refers in particular to the group of people already infected by HIV/Aids, part of them already under treatment, therefore forming a priority group also for nutrition aspects required to fortify their body systems to better respond to the treatment.

V. Nutrition aspects emerging from the ProPESCA growth pole planning exercises

10. CHAPANI staff have participated to the ProPESCA Growth Pole planning exercise. However, the GP planning process did not produce much information on nutrition, which could be due to two reasons: (i) the GP planning took place when CHAPANI activities were initiated in the field, and therefore too early for the CHAPANI staff to be fully understand their role and the philosophy of ProPESCA to make important contributions; and (ii) lack of nutritional competencies within CHAPANI at that time, especially considering that the nutrition component is scheduled for the second year of the project. As such, the expectations on this component will be left to the baseline survey. It is recommended that the baseline survey include nutrition information. The starting point of this component would then be a series of activities aiming to inform women and men in the villages on good hygiene practices, food diversification and eating balanced food; food conservation; healthy feeding practices also for pregnant women and children; demonstration kitchens and demonstration vegetable gardens. Community leaders will receive a short capacity training on the importance of a healthy, balanced diet in order for them to support new initiatives and to promote a wider variety of food products. Coordination with the health authorities and with other NGOs promoting similar initiatives (if any) is also recommended to allow for more efficiency and synergies.

11. Given the large population in the project area, outreach by multiplication will be important. Apart from radio broadcasting, training can be conducted using an approach whereby community members can further conduct training for other members in the community in a trickle down approach. This will increase the coverage ratio for the current number of project officers and allows more people to benefit from the project activities.

12. Priority activities in the nutrition component, proposed by the mission, include: completion of the baseline survey (for both components); infant feeding and hygiene and food preservation.

Table 1: Agreed Actions

Agreed action	Responsibility	Agreed date
53. Carry out the baseline survey	ADPP	31 Jan 2013
54. Establish demonstration programme for hygienic food preservation	ADPP	31 Jan 2013
55. Establish demonstration programme for hygienic food preparation for children	ADPP	31 Jan 2013

13. Financial Progress

14. The CHAPANI grant has received a USD 250,000 disbursement upon signature of the agreement. Of this amount, ADPP had spent MZM 1,105,202 (about USD 40,000) until the end of July 2012. Further disbursements by IFAD require justification of 80% of the initial disbursed amount.

Appendix 5: Funds Flow and Related Fiduciary Issues for ProPESCA and Future Projects

A. ProPESCA funds utilization and e-SISTAFE

15. ProPESCA 2011 and 2012 project expenditures have only totalled USD 464 466 up to now, due to a significant extent to the slow implementation of the new Funds Flow system e-SISTAFE, and even more relevant due to IFAD being the project only source of disbursements so far. This initial delay also shows in the low percentage of 9.3 % of the 2012 year AWPB having been disbursed up to end August. Now that disbursement issues are mostly resolved, it is anticipated that significant improvements will be seen in the next years.

B. The Financial Management and Funds Flow system – e-SISTAFE

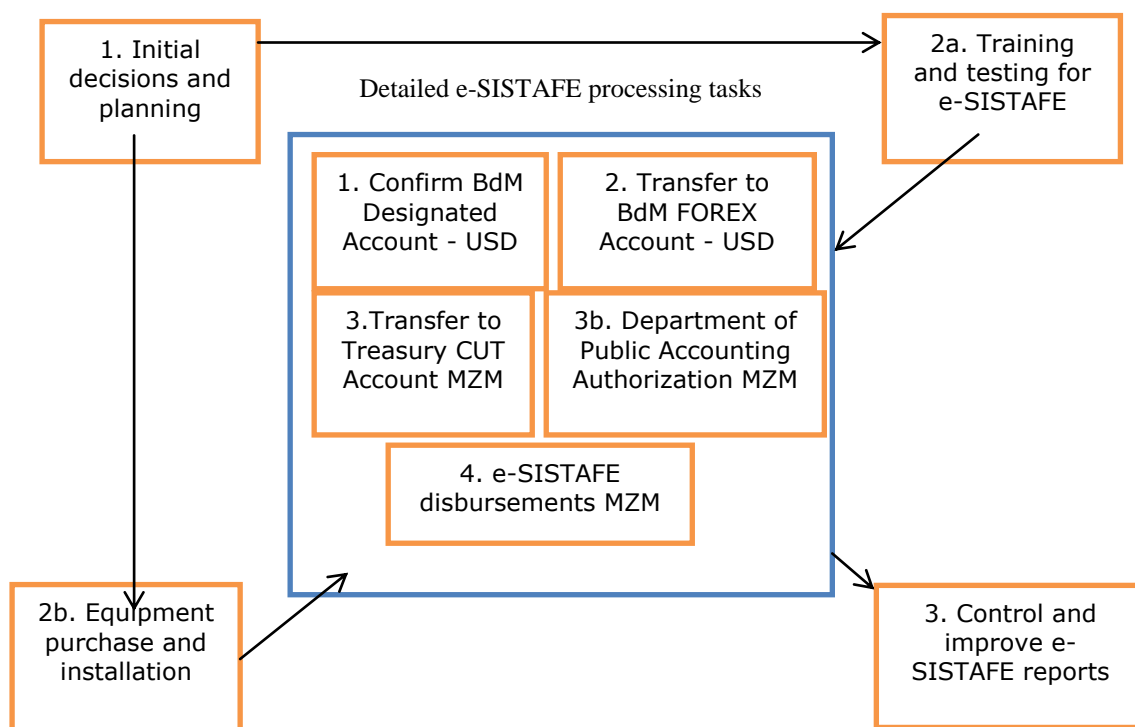
16. The financial management and funds flow of ProPESCA is closely linked to Mozambique's Government new and mandatory budgeting and financial management system e-SISTAFE. It is the first time that an IFAD-supported project in Mozambique will rely essentially on country systems for its financial management and funds flow, and it is an important precedent for future projects.

17. e-SISTAFE originated from a Mozambique-Brazilian development cooperation and a similar 1997 project in the later country. e-SISTAFE law was approved in February 2002 and implementation started gradually in 2004 and 2005. A 2006 review still noted delays on several aspects of the system. In 2012 the system was still not fully operational in some regions. Also processing capacity is much higher at CEDSIF headquarters users centre rather than over public networks, even in the Maputo area, leading to frequent delays. These issues are gradually being improved, and it is expected that this advanced system will contribute significantly to the public financial management improvement in Mozambique.

18. The e-SISTAFE accounting and financial connections link Government's Budget, Public Accounting, Treasury, State Assets management and Government internal control. Another key aspect of the system is the use of the single treasury account (CUT in Portuguese) which is held at the central bank (Banco de Moçambique). Recently donor project funds have also been included in e-SISTAFE, in a specifically designed programmatic model. Key technical features of e-SISTAFE and CUT are the linked databases kept by SISTAFE / CEDSIF at Banco de Moçambique, in which system owners and simply system users participate at their appropriate levels, with a high number of safeguards.

19. As to ProPESCA experience, the key e-SISTAFE implementation phases were the initial discussion meetings as part of the February and October 2011 missions, followed by the implementation planning and detailed phases. The timing of these phases included 6 months for setting the budget and other related accounts and 1 month for initial training. Also the purchase and installation of 3 networked computers at IDPPE and start of processing occurred 10 months after the initial date. 2 more computers are being purchased. Training in some regional delegations is still going on until next month. Otherwise, IDPPE headquarters will be used as processing backup.

20. Initial processing has been successful but requires more effort than initially anticipated. It includes written requests for funds transfer from the USD Designated Account at Banco de Moçambique to the corresponding USD FOREX account, then to the matching MZM CUT account at Treasury, and finally the processing of disbursements on the e-SISTAFE system itself, which needs to be started 2 weeks before actual payment is needed. Payments for funds advances to regional delegations also require specific authorization from the public accounting department, to be requested 1 to 2 weeks in advance.



21. Reporting directly from e-SISTAFE has been arranged in a useful way, although still with a few limitations, such as some type of expenses not being part of early reports. IDPPE has kept Excel based accounting and report information for backup and control. The new disbursement documentation used for e-SISTAFE was reviewed. It included a detailed request, a listing of funds transferred into the single treasury account (CUT), the e-SISTAFE generated payment report and its Excel based backup. Although still evolving, the disbursement process was well planned and had adequate controls.

22. e-SISTAFE has announced the coming of new user defined reports capacity in a few months. However significant effort still has to be committed now to ensure that the e-SISTAFE generated reports accurately reflect the project categories as defined in the ProPESCA financing agreement schedule 2, so that it can be used directly and without further handling for both management purposes and audits. The next priority is to design a specific e-SISTAFE report that reflects the funds spent according to the project main components, also directly from e-SISTAFE and without further handling by the project Financial and Accounting management and staff.

C. Lessons learned for future IFAD-supported projects Mozambique

23. Although ProPESCA phases and timings can be improved, it is an initial reference for other IFAD-supported projects using country systems in Mozambique such as PROSUL, for which CEPAGRI is already in contact with ProPESCA for the lessons learned.

24. Among identified advantages and limitations of using mostly e-SISTAFE for funds flow for ProPESCA are the following:

- Advantages:
 - National liquidity management improvement
 - Disbursements security and certification
 - Consistency of funds flow process
- Limitations:
 - Initial loss in efficiency

- Occasional slower payments
- Maintain alternative system option

25. Country systems have also been used for IFAD projects in other countries, and comparing these experiences can also be very useful for IFAD. One risk that so far has not impacted e-SISTAFE is a potential national liquidity crisis. It would be useful to verify the implications when it happened in other countries and how it was addressed by IFAD-supported projects.

Appendix 6: Project Implementation and Management

1. **Project management performance.** ProPESCA is a well led and well managed project. The extensive delays that have slowed progress during 2012 are substantially due to the slow introduction and operationalization of the e-SISTAFE system (see Fiduciary section.) The system is now operative and as a consequence good progress has been achieved in several areas.

2. Particularly notable has been the testing and application of the growth pole (GP) planning system with three GPs, Moma, Angoche and Larde completed. The plans include assessment of the fisheries sector, SWOT analysis, mapping of the pertinent value chains and the GP Action plan. The approach developed earlier in the year has been found to be valid. A further 19 GP plans will be carried out in October and November. There will be three teams operating in the north, centre and south with the project manager overseeing all three zones on a roving basis. As the results of these 19 GP plans will not be available until early 2013 it will be necessary to anticipate significant AWPB revisions during 2013. There are sufficient resources in the current 2012 AWPB to carry out all the planned GP exercises on schedule.

3. The up-scaling from a provincial (Nampula) to a zonal (Sofala Bank) to a national programme that will have 30 growth poles in 8 different provinces is significant step up in size and geographic and administrative diversity. This challenge means that there will be far more emphasis on facilitation rather than management. Hence focus needs to be clearly on implementation capacity building and devolution of responsibility to the delegations. This has been the operating modality of the PCU through Sofala Bank – in that sense it is not new but it does mean that the effectiveness (timeliness and accuracy of data entry) is critical for assessing and supporting implementation of the GP action plans.

4. The Mission worked with the PCU to initiate a GP planning model that will allow comparative investment decisions and resource allocations to be made. The outline model is under review to see whether it can be simplified. It then needs to be structured to enable it to respond to individual GP planes as well as to consolidate the plans across the whole project. This work is on-going and in addition to the immediate Mission responsibilities.

5. Unfortunately the PIM has not been finalised as the financial guidelines section has not been drafted – this should be done as a matter of urgency now that the e-SISTAFE system is operative. The following outline guide was shared with the PCU to act as a check list as they finalise the PIM.

- I. Introduction
- II. Programme Description and Costs
- III. Targeting Mechanisms
- IV. Programme Coordination and Management
- V. Monitoring, Reporting, Knowledge Management, Studies And Evaluation
- VI. Programme Financial Resources and Costs.
- VII. The Financial Management Systems, Procedures And Guidelines
 - i. Key Financial Management Responsibilities.
 - ii. Overriding Controls on Programme Expenditure.
 - iii. Financial Planning Through Annual Work Plan And Budget Process
 - iv. Funds Flow and Banking Arrangements And Expenditure Reporting.
 - v. Accounting and Financial Reporting
 - vi. Maintenance of Key Registers.
 - vii. Withdrawal Applications and Disbursement Guidelines.
 - viii. Procurement Procedures and Guidelines.

6. The **2012 AWPB** was amended in July 2012 with this being facilitated by the prompt review and provision of the necessary “no objection” by IFAD within one week. The current utilisation of the 2012 AWPB is summarised in Table 1. The 2013 draft AWPB will be submitted on schedule by 15 November 2012. In preparing the 2013 AWPB it is important that the initial expenditure projections are conservative. Given that there is only an 11% utilisation of the 2012 budget as of the

end of August any significant negative expenditure variation in 2013 will almost certainly lead to a performance downgrade by IFAD that can have a negative impact of the new PBAS allocations. Given the time that will be needed to complete design work and procurement processes for major works it will be better to provide for quarterly AWPB reviews with IFAD during 2013 and most probably 2014.

7. **Monitoring and evaluation.** The MIS system, based on the successful one used for PPABAS, is fully developed and operational. Key training was provided by the consultant in March 2012 and this has been followed up by the PCU with two representatives from each delegation having been trained in September 2012. The main issue now is for the procurement of the M & E computers (being done with the e-SISTAFE computers) to be completed. Once they have been delivered it will be possible for the full one-week training programme (to be done at each delegation) to be carried out. This will be done immediately after the completion of the 2012 Growth pole planning exercises. So it is expected that the training will be carried out between December 2012 and February 2013. The M&E leaders in each delegation responded positively to their initial round of training (Beira, September 2012) in that they found the system relevant and appreciated that it has been built on the earlier system that they are familiar with.

8. As noted earlier ensuring that the M & E system is fully activated and that the GP plans integrated into and actively reported on will form the base information that will enable the PCU to respond in timely and location specific manner. It will not be possible to support and oversee implementation on a regular visit schedule.

Table 1:

ProPESCA 2012 AWPB Expenditures by Component

('000 MZM)

Component	Total			
	Orig	Revised	Actual	%
	AWPB		Exp.	
1. Supporting Dev. of Higher Value Fish	18,041.3	25,238.9	28.6	0.11
2. Improving Economic Infrastructure	6,025.5	-	-	-
3. Financial Services	17,327.9	17,956.4	-	-
4. Institutional Strengthen, Policy & Project Mgt	45,757.9	47,588.4	10,025.9	21.07
Total	87,152.6	90,783.6	10,054.5	11.08

Source :PMU 31 August, 2012

9. There are two areas where action needs to be taken. Firstly the recruitment of the consultant to help develop the base-line survey and who will be responsible for the data analysis. The actual survey will be carried out by IDPPE staff in each delegation and will, be initiated as part of the M&E training – as such it is expected to have the data analysis completed in February 2013. The second item is the recruitment of the M&E Assistant. This has been recognised as important and needs to be actioned.

10. **Knowledge management.** Innovations arising from PPABAS that should be replicated to include the empowerment of fishers and their communities in managing their fisheries resources, accessing markets, organising saving and credit groups (PCRs) to plan and manage their activities themselves, as well as the promotion of market linkages through the provision of economic infrastructure.

11. The market operating model has been found to encounter difficulties due to the economic management structure, which allows only for a minimal part of revenue generated by the market to be

used for operation and maintenance. This provides scope for introducing a change in approach where economic management is more directly influenced by the users' committee in ways that will directly impact operation and management of the market.

Agreed action	Responsibility	Agreed date
56. Complete GP plans	PCU	30/11/12
57. Finalise PIM	PCU	15/10/2012
58. Revise 2012 AWPB	PCU/IFAD	15/10/2012
59. Submit 2013 AWPB	PCU	15/11/2012
60. Initiate full M & E training	PCU	1/12/2012
61. Recruit baseline survey consultant	IDPPE	25/10/2012
62. Recruit M & E Assistant	IDPPE	30/11/2012



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