

## **The Republic of Seychelles**

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### **Competitive Local Innovations for Small-scale Agriculture Project (CLISSA)**

#### **Mid-term Review**

Main report and appendices

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East and Southern Africa Division  
Programme Management Department



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## Currency equivalents

Currency Unit	=	Seychelles Rupees (SCR)
US\$1.0	=	SCR 13.2959 (March 2016)

## Weights and measures

1 kilogram	=	1000 g
1 000 kg	=	2.204 lb.
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres

## Abbreviations and acronyms

AWPB	Annual Work Plan and Budget
CBS	Central Bank of Seychelles
CLISSA	Competitive Local Innovations for Small-scale Agriculture Project
DBS	Development Bank of Seychelles
GoS	Government of Seychelles
IAs	Implementing Agents
IFAD	International Fund for Agricultural Development
KM	Knowledge Management
M&E	Monitoring and Evaluation
MFTBE	Ministry of Finance, Trade and the Blue Economy
MFA	Ministry of Fisheries and Agriculture
MoU	Memorandum of Understanding
NPSC	National Project Steering Committee
OAG	Office of the Auditor General
ODL	Online Distant Learning
PMU	Project Management Unit
RIMS	Results and Impact Management System
SAA	Seychelles Agriculture Agency
SAHTC	Seychelles Agriculture and Horticulture Training Centre
SCR	Seychelles Rupees
SEnPA	Small Enterprise Promotion Agency
SFA	Seychelles Fishing Authority
STC	Seychelles Trading Company
TOR	Terms of Reference
TWG	Technical Working Group
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WA	Withdrawal Application
WB	World Bank

## Map of the CLISSA Project area

### Seychelles

#### Competitive Local Innovations for Small-Scale Agriculture Project (CLISSA)

##### Mid-term review report



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 | 22-04-2016





## I. Introduction<sup>1</sup>

1. IFAD country programme in Seychelles is made of one operation: **the Competitive Local Innovation for Small-Scale Agriculture Project (CLISSA)**. The project aimed at reviving the agricultural sector, strengthening small-scale artisanal fisheries and promoting rural microenterprises in the islands of Mahe, Praslin and La Digue. The overall goal is to contribute to equitable and sustainable pro-poor agricultural and rural economic growth and employment. The project development objective is to promote modern and sustainable agricultural and fishery practices to increase and diversify market access for smallholder farmers and fishers. The project has 3 technical components: (i) Component 1 - Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers; (ii) Component 2 - Improving access to agricultural and rural finance; (iii) Component 3 - Strategic capacity building and infrastructure.

2. The project was approved by the IFAD Executive Board of 07 April 2013 as an ordinary term loan of SDR 1.98 million to the Republic of Seychelles. The Financing Agreement was signed on 22 May 2013 and CLISSA entered into force in November 2013. Its completion and closure dates are scheduled on 31 December 2018 and 30 June 2019 respectively. The Government's contribution to the project was evaluated to USD 0.282 million to cover salaries of the Project Management Unit (PMU) staff, accommodation and utilities for the PMU; taxes and duties on imported goods, and Value Added Tax. The Beneficiary contribution was estimated at USD 91,000, the private sector was expected to contribute USD 0.12 million, and other donors contribution were evaluated at USD 0.248 million.

3. Since the launching of CLISSA project in 2013, IFAD and the Government of Seychelles have carried out 3 supervision missions and one follow up mission. The follow up mission carried out in November 2015 with the objective to provide orientations and the way forward for the implementation of *Component 2 of the Project - Improving Access to Agricultural and Rural Finance*, concluded that in the current context of the Seychelles financial landscape, CLISSA Line of Credit (LoC) is not justified given that the Government of Seychelles (GoS) has set up financing schemes (also with a revolving facility) for on-lending at below market rates within commercial financial service providers (banks and credit union) which also offer their traditional products priced at competitive market-based rates ranging between 10 and 12%. Consequently, the availability of these cheap funds from government-subsidized schemes has made the IFAD-supported market-based LoC less competitive. *The mission therefore recommended that an anticipated mid-term review of CLISSA project be carried out with among other objectives to reallocate the resources tied in the non-disbursing Line of Credit to activities such as infrastructure and capacity development and revise the Project design document accordingly.*

4. In this context, the Mid-term review mission took place from 29 February to 11 March with the following specific objectives: (i) assess the level of results so far achieved by CLISSA project against the planned objectives and indicate whether the current targets are still achievable within the given timeframe, (ii) assess the appropriateness of the project design and the implementation arrangements for achieving the project goal and development objective, and (iii) make recommendations/redesign new activities to correct defects found in the original design and implementation (e.g. reallocation of the non-disbursing funds tied under CLISSA line of credit).

5. Due to its low funding allocation and the existence of only one IFAD operation in the country, no Result-based Country Opportunity Strategies Paper (RB-COSOP) was developed for Seychelles in the past. However, following IFAD new guidelines for countries portfolio management, a Country Strategic Note is required for Seychelles. In this context, the mid-term review mission was also an opportunity to carry out consultative meetings with Representatives of the Government of Seychelles, development partner and key stakeholders of the rural sector in Seychelles in order to prepare a

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<sup>1</sup> Mission composition - **For IFAD:** Henrik Franklin, Lead Portfolio Advisor ESA and IFAD Country Director a.i for Seychelles; Valentine Achancho, Mission Technical Leader, Programme Officer IFAD; Jonathan Agwe, Senior Technical advisor, Rural finance, IFAD, Paul Picot, Rural Finance consultant; Davis Atugonza, Financial and economic analysis and Financial Management consultant; Pius Kamau Ng'ang'a, Agri-business consultant; Michele Pirazzoli, Rural infrastructure consultant. **For GoS:** Michael Nalletamby, Principal Secretary of MFA; Georges Bibi, Coordinator CLISSA; Charles Elizabeth, Procurement Officer. CLISSA and Jude Barra, Accountant, CLISSA.

Country Strategic Note (CSN) which will define priority indicative areas for IFAD investment in partnership with the Government of Seychelles in the medium term (next 24 - 36 months).

6. At the beginning, the mission held an introductory meeting with the Minister of Fisheries and Agriculture, H.E Wallace Cosgrow and a technical meeting with the members of CLISSA steering committee, chaired by M. Michael Nalletamby, Principal Secretary of the Ministry of Fisheries and Agriculture (MFA). The mission had specific discussions with CLISSA Project Management Unit, representatives of the Ministry of Finance, Trade and The Blue Economy (Director of Public Debt, and Senior Project Accountant), the Ministry of Tourism (Director of Policy, strategy research and international cooperation), Representatives of Bankers association, Representatives of Seychelles agricultural agency (Chief Executive Officer and technical Staffs), FAO technical focal point at the Ministry of Fisheries and Agriculture, the Coordinator of the Agricultural sector development study at the MFA, the desk officers at the Ministry of Foreign affairs for the World bank and the European Union; the Deputy Governor of Central Bank of Seychelles, the head of credit unit of Development Bank of Seychelles; the UNDP programme officer, the Director and Deputy Director of Seychelles Maritime Academy and the president of Seychelles Farmers Association (SeyFA). The field mission took place on the island of Mahe, Praslin and La Digue where the team met with vegetable crops and livestock small scale producers, artisanal fishers, Representatives of Praslin Fishers association, Representative of Seychelles Fishing and boat owners association, Private sector operators and potential business partners of CLISSA project (Chief Executive Officer of ISPC Ltd, Representatives of Small Enterprise Promotion Agency – SenPA), CLISSA implementing partner for the development of market arrangement initiatives for small farmers (SGM & Partners). A detailed list of people met during the mission will be provided in the annex of the Mid-term review report.

7. The main conclusions of the mission were discussed and approved at a wrap-up meeting in Victoria, Mahe, chaired by M. Michael Nalletamby, Principal Secretary of the MFA on 11 March 2016 in the presence of the members of the steering committee and CLISSA Project Management Unit (PMU). The team members are grateful for the support from the MFA and the CLISSA PMU during this mission.

## **II. CLISSA Project implementation strategy and mechanism**

8. **Implementation strategy and approaches.** Overall, according to CLISSA design document, the project is not poverty focus per se but many of its beneficiaries who have self-selected themselves for participation in project activities belong to the IFAD target group. The Project is oriented towards market based activities which require the participation of individuals with entrepreneurial ability and the capital to invest in small agricultural and also non-farm enterprises.

9. The strategy retained for the project support to small farmers and fishers are based on the following: (i) solving only some of the main weaknesses that characterise their economic activity and hinder the capacity to effectively respond to the market and will not attempt to improve the whole value chain; (ii) deliver quickly and efficiently; (iii) link sellers with buyers in a systematic way; and (iv) close monitoring through a beneficiary database that enables to gauge results, outcomes and poverty impacts during implementation and allows to improve the implementation performance.

10. For crop production, it was indicated that where required, farmers in financial distress can be revitalized through a revival package that would facilitate ultimate re-integration into domestic financial markets and promote modern adaptive agricultural technologies - short cycle and local more resistant varieties, small scale irrigation, drip irrigation, conservation agriculture, organic agriculture, etc.).

11. In fisheries, where reliance on local fish production by the tourism industry is already higher, the project was expected to use and promote the diversity of fish stocks available in the Seychelles and provide support to the Government efforts to manage fish stocks that are more in demand and thus subjected to heavy fishing pressure (such as red snapper). The project was expected identify opportunities to promote better organisation among fishers and more effective fishing operations to enable them to improve their interactions with institutions, consumers and the tourism sector in particular. The project was also expected to support and expand existing initiatives to certify local fisheries products as products from responsible fishing practices, such as the Seychelles Hook and Line Fishermen initiative already being implemented with the Seychelles Bureau of Standards (SBS).

12. **Implementation Mechanisms.** At design, it was planned that the Ministry in charge of Agriculture will have the overall responsibility for the implementation of CLISSA. The Ministry of Agriculture will coordinate with the Ministry in charge of finance and other relevant Ministries and Agencies. A National Project Steering Committee (NPSC) was established and chaired by the ministry in charge of agriculture. Two Technical working groups (stakeholder groups and key institutions) of approximately 15 participants each were planned to be established, one for agriculture/livestock and one for rural and microfinance. The function of the Technical working groups were to provide overall technical guidance to the project.

13. For the implementation of component 1. It was planned that a specialised service provider will be contracted under the supervision of the PMU to (i) facilitate the elaboration of a strategic plan and associated capacity development requirements for each supported small farmer and fisher; (ii) implement the training programme for these small farmers and fishers and, (iii) facilitate business links with buyers.

14. For component 2, Subsidiary Loan Agreements were to be signed by the PMU with selected financial institutions and the remaining balances of the fund could be used to replenish a future agricultural development fund open to all interested banks in the country.

15. It was planned that the Project will sign an MoU with SFA and SAA for support in the implementation of subcomponent 3.1 on the basis of an Annual Work Plan and Budget (AWPB). Institutional support will be managed directly by the PMU. Relevance of the support requested will be validated by the TWG. For Subcomponent 3.2, processes and procedures for undertaking small-infrastructure works will follow the established government mechanisms through transparent bidding processes.

### III. Overall assessment of CLISSA implementation at mid-term

16. **Relevance.** The mission noted that in the present context of the Seychelles economy characterized by high dependence on the tourism sector, high vulnerability to external shocks, climate change and natural calamities and declined food self-sufficiency, improving food security and lessening the dependency on unreliable food imports remain a priority for the government through the promotion of its domestic agricultural sector. CLISSA project is therefore relevant as it contributes to the re-vitalization and modernization of the agriculture, livestock and fisheries sector.

17. **Targeting.** The mission noted that although the target categories of beneficiaries remain relevant, the initial plan to reach 980 farmers market oriented small farmers; 1,330 artisanal fishers and 7,500 backyard gardeners was over ambitious. Present data from the Seychelles National Bureau of Statistics indicates a total number of 652 commercial farmers and 8000 registered backyard gardeners. On this basis, CLISSA target represents 150% and 93.75% of the target group of market oriented farmers and backyard gardeners respectively. *The Mid-term review mission recommends that the targeting figures should be revised to consider 40% of each targeted population. The revised target groups will be as follows: 261 market oriented small farmers; 532 artisanal fishers and 3200 backyard gardeners.*

18. **Effectiveness.** CLISSA records two years and three months of implementation. Overall, the mid-term review mission noted that the level of disbursement of the IFAD loan as of 29 February 2016 is low, standing at 18.71% through four withdrawal applications and the total execution rate including Government counterpart fund is about 17%. Overall, disbursement trend on all components is below target, particularly Components 1 and 2. Component 1 - Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers has absorbed USD 162,000, representing 10% of the total project budget and 15% of the planning period under review; Component 2 - Improving access to agriculture and rural finance has posted only USD 36,000 representing 3% of the total project budget and 5% of the planning period; Component 3 - Strategic capacity strengthening and infrastructure has absorbed USD 270,000 representing 43% of the allocation at design and 52.4% of the planned allocation for the period under review and, component 4 - Programme management has utilised USD 156,000 representing 45% of the allocation at design and 84.8% of the planned allocation for the period under the mid-term review.

19. The main reasons for this low financial performance are: (i) the very ambitious initial planning at project design placing 66% of the project resources (USD 2,477,000) in the first two years and only 6% (USD 218,000) for year 4 and 5. As such, the initial planning did not consider the necessary time

needed to set up preparatory activities such as the elaboration of the project implementation tools and the baseline studies required before the launching of effective project support to farmers; (ii) the low delivery capacity of the implementing agencies (The Seychelles Agricultural Agency and the Seychelles Fishery Agency) who have limited number of personnel in the field and are also engaged in several operation sponsored by the government of Seychelles and or other development partners - It is important to note that CLISSA design was based on the fact that “*strong commitment of key stakeholders from the executing ministry and implementing agencies from the public and private sector will ensure ultimate project success*”; (iii) the non-disbursement of the CLISSA line of credit, which appeared non-competitive in the actual context of the presence of cheaper credit line available in the market.

20. *The mission proposes a new planning of the project budget which is adapted to the present stage of project progress and recommends that the PMU should outsource to private consultants or training institutions technical support and capacity building of beneficiaries to fast-track the level of implementation.*

21. **Project Outputs.** The level of realization of activities and outputs can be summarized as follow:

- **Component 1 - Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers.** The main achievement are : (i) the benchmark assessment of farmers and fishers to determine their capacity to meet market needs, (ii) the market study that gave key information on demand gaps, market specific needs in terms of produce, quality and quantities, price, profit margin for crops, livestock and fisheries for value chain at producers, wholesalers and consumers level; (iii) preliminary discussions with some hotels and the Seychelles Trading Company (STC) to explore potential collaborations with farmers for the supply of basic food crops and fishery products; (iv) organisation of farmers in clusters in view of establishing market arrangements with buyers (45 farmers are being organized in four clusters and 10 fishers in one cluster) and, (v) training of farmers (market oriented and backyard gardeners) and fishers covering specific thematic topic for agricultural production and fishery - the overall level of attendance on these trainings was low (about 15%). *The mission recommends that the project reinforce the sensitization and information on training and develop training programme to inform participants on time on the calendar.*
- **Component 2 - Improving Access to Agricultural and Rural Finance.** The main activities undertaken in this component was a study for the reshaping the component and the due diligence of the DBS. The conclusion out of the study was that the CLISSA line of credit is not viable in the present context of availability of cheaper and subsidized loan supported by the government. However the mission has identified a number of non-lending rural finance activities that will *reinforce capacity building support related to access to finance both on the supply side for the banks and on the demand side for the target groups. For the banks the capacity building will include among other topics the support to design of adapted cash flow based financial products, including value chain financing approach involving contractual linkages between farmers and off takers. On the demand side, support will be focused on financial education of small scale farmers and artisanal fishers, as part of capacity building in business management, objective being a better understanding by the target groups of the financial services on offer and an improved capacity to make the right choice of financial services to secure and improve their business, including not only loans but also savings.* These activities will now be executed under component1.
- **Component 3 - Strategic capacity strengthening and infrastructure.** The mission noted with satisfaction that a number of investments in equipment and infrastructure for water harvesting and storage (water reservoir and barrage for irrigation systems) have been realized. However the mission noted that the efficiency of some collective infrastructure could be questioned. *The mission recommends that prior feasibility analysis should be carried in order to prioritize future investment and ensure better outreach.*
- Regarding the **project management**, the mission also noted that the steering committee meeting are not organized as planned. The mission also noted important delays in the preparation of

withdrawal applications which has negative impact on the project payments and results. As the project accountant is also having other duties within the Ministry of fishery and Agriculture, *the mission brings this situation to the attention of the MFA to find a proper solution.*

22. **Project Outcomes.** Whilst project implementation is still at relatively early stage, giving the progress on activities and outputs as outlined above, and with the expected thrust post MTR it is expected the development objectives to promote modern and sustainable agriculture and fisheries practices to increase and diversify market access will be achieved contributing to improve living conditions of targeted beneficiaries. All project outcomes are also expected to be achieved. Small farmers, fishers and rural micro-entrepreneurs are expected to show increased capacity to identify and service market demand. Given the actual reallocation of funding the programme will only contribute marginally to improving access to equitable financial services, but will create suitable condition for improved rural financial inclusion. Finally the capacity of rural service providers will be strengthened and small scaled collective infrastructures will be functional and available to serve farmers. The revised logical framework will provide updated indicators to measure the progress on the development results.

23. **Implementation strategy.** The mission noted that although the backyard gardeners appear to be the most important target group number wise, concentration of support to them could not lead to significant impact as farming is a secondary activity for this group and the project is facing difficulties in mobilizing these beneficiaries to invest more time and resources in agriculture. The mission noted that the project team has engaged with a number of market oriented farmers, a process of organization in cluster in view of preparation of business partnership with buyers.

24. *The mission recommends that the clustering process indicated above should serve as a basis for the organization and provision of integrated support to farmers operating within the same area. The said integrated support could then be provided as facilities (inputs, water supply and other infrastructures) and technical advice aimed at strengthening the beneficiaries' entrepreneurial capacity to carry out their farming projects and establish consistent market contracts with buyers.*

25. **Efficiency.** Overall, it is difficult to measure the project efficiency at this stage as the project is now engaged in providing the key investments needed for beneficiaries to carry out their activities. However the mission noted the limited outreach capacity of some collective infrastructures (barrages, spot rehabilitation of roads) due to their location in the field, serving a very limited number of beneficiaries. *As indicated above, the mission recommends that collective investment planning should be based on detail feasibility study which will include the evaluation of their outreach capacity for efficiency and better value for money.*

Agreed action	Responsibility	Agreed date
1. <i>Revise targeting to consider 60% of each targeted population. The revised target groups will be as follows: 391 market oriented small farmers; 798 artisanal fishers and 4800 backyard gardeners.</i>	M&E with support from Coordinator	Immediate
2. <i>Outsource to private consultants or training institutions technical support and capacity building of beneficiaries to fast-track the level of implementation.</i>	PMU/Coordinator	Immediate and continuous
3. <i>Carry out prior feasibility analysis to prioritize future collective infrastructures investments and ensure better outreach.</i>	PMU/Coordinator	Immediate and continuous
4. <i>Ensure the holding of steering committee meetings as indicated in the financing agreement.</i>	MFA	Immediate and continuous
5. <i>Ensure the holding of steering committee meetings as indicated in the financing agreement</i>	MFA	Immediate and continuous

## **IV. Review of CLISSA implementation progress by component**

### **A. Component 1: Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers**

26. This component aimed at enabling small farmers, rural micro entrepreneurs and fishers to effectively respond to market signals through targeted business development, marketing and technical support services as well as establishing links with the market, and to promote innovative technologies and green value chains. The activities are structured around two subcomponents.

- *Public Private Partnership (PPP) and technology development.* The main activities are capacity building of small farmers and fishers in technology adoption, business development and business management, quality improvement of selected products, and identification, trials and promotion of technologies packages of significant importance to the development of the sector.
- *Food security and productivity development.* It was planned that this will be enhanced through the promotion of home and community gardens on targeted extensive and intensive horticulture crops (green houses and hydroponic), fruits (banana & papaw), and livestock. The project will also enhance productivity at household level through training and other forms of capacity development.

#### **Public Private Partnership (PPP) and technology development**

##### **Output 1.1a): Identification and assessment of technology packages for their efficiency to local conditions**

27. *The assessment of this output is rated as moderately satisfactory.* The mission noted that the project had identified four technologies (Integrated Crop Management (ICM); Drip Irrigation; Shed House and Farm mechanization) and an assessment of the technology packages for their efficiency to local conditions had been done. Seven (7) Technical working group (TWG) meetings had been held in 2015 against a target of 14 (50% achievement) and three agriculture technologies namely integrated crop management, development of shade houses and drip irrigation system were recommended to the NPSC for adoption. Pre-trial preparations and propagation of technologies had taken place. The trials of the technologies based on market studies for crops and fisheries had not been done.

28. The TWG are not meeting regularly to finalize the identification and validation of the technologies. *As recommended in the last supervision mission, the mission reiterates the need to evaluate economic viability of the identified technologies prior to the large scale promotion. The mission also recommends that the validation of the selected technologies should include criteria on internationally accepted quality, health, environmental and security standards.*

##### **Output 1.1b): Capacity building small farmers and fishers in the technology adopted, business development and business management, quality improvement of selected products**

29. *The assessment for this output is unsatisfactory.* The mission noted that 14 small scale farmers (including 5 women) were trained on post-production processing and crop management at SIAH against a target of 75 (19% achievement). Fishermen post-harvest handling training had been conducted to 14 fishermen against a target of 100 (14% achievement). No on-farm trials were carried out during the period up to MTR while training on new methods for fishing trap making and safety at sea training did not take place.

30. The project reported that it faced challenges with encouraging farmers and fishermen to attend trainings. This was despite the fact that project had carried out 26 sensitization campaigns on the trainings. *The mission recommends that the training needs be links to operational interest of participant such as market requirements to attract more farmers to the trainings. New training approaches such as on-site/on-farm training should be explored and training programming should be*

*done sufficiently in time for better preparation of farmers. The MTR also recommends the establishment of closer collaboration with the Seychelles Maritime Academy to offer practical trainings for fishers covering topics such as: safety while at sea, how to service and maintain boats engines for sea worthiness, communication while at sea, fish storage while at sea and how to preserve fish.*

**Output 1.1c): Training for small farmers and fishers in business development and entrepreneurship**

31. *The assessment of this output is moderately satisfactory.* The mission noted that training of farmers and fishers on entrepreneurship skills, business planning and development have just started. The project had hired a private consultant in 2016 who was currently carrying out training of 40 crop farmers and 10 fishers to engage in business arrangement with buyers. Priority crops had been identified using existing market study and request from potential buyers. An assessment of production capacity of farmers has been done with gaps and needs established to meet production targets of selected priority crops and fish types. The training also involved motivational sensitization towards formation of farmer clusters to encourage farmers to work together for better marketing arrangements and linkages. It is planned that an agri-business forum will be organized in the month of April 2016 for farmers, buyers and agricultural stakeholders to meet and network for business.

32. *The mission recommends that: (i) CLISSA support a study on supply and demand opportunities for the selected farmer clusters; (ii) ensure the follow up of results of the Agri-business forum for farmers and buyers in order to effectively establish the expected business arrangements; (iii) provide specific training on production, productivity enhancement techniques for targeted crops, quality and presentation of produce, logistic support to ensure quality meets presentation standard and farmers training on marketing and negotiations with buyers.*

33. *The mission also recommends the provision of Support to the Fishermen and Boat Owners Association (FBOA) on their branding initiative in partnership with ISPC for sale of fish produce from about 50 artisanal fishers in Mahe (La Providence). CLISSA support would include: promotional campaigns for promoting the relationship/partnership and attracting young people towards getting into fishing activities; capacity building for the FBOA towards training of fishers for certification; logistical support to FBOA towards the setting up of a fish auction centre for artisanal fishers at Providence Fishing Port; support towards setting up a provision store through an initial stock to generate a revolving fund to obtain small gears; communication and support for fishers participation to fishing trade exposure. Working with FBOA is an opportunity to have a PPP partnership bringing FBOA, SFA, ISPC and CLISSA on board. The initiative could be extended to other 100 artisanal fishers from Praslin and La Digue.*

**Output 1.1d): Communication and promotion campaigns**

34. *Assessment for this output is rated satisfactory.* The mission noted that the project had successfully sent out 72 (136% achievement) Mobile Phone Based Communication Campaigns (SMS and Voice Messages) to 469 recipients who received messages on various topics three (3) times a week based on the season and activities that SAA was conducting. The project had also hired a consultant to produce documentary on promoting women and youth in agriculture. This documentary had been broadcasted twice (2) on local TV (33% achievement). Four (4) Audio, TV and Printed material had been produced for sensitizing backyard farmers representing an achievement rate of 100%.

35. *The mission recommends that CLISSA continue with production of promotional documentaries with special focus on encouraging more youth and women to take up crop farming and fishing activities. Promotional activities should be embedded on practical activities and directed to encourage and show case practical success of PPP Partnerships such as the relationship between farmers associations and buyers (FBOA/ISPC/Fishers/CLISSA).*

**Output 1.1e): Market study and assessment of value chain actors, capacity of suppliers and preparation of Public Private Partnership Plan (PPP) action plan**

36. *The mission rates the assessment for the output satisfactory.* The project had conducted a market study to analyse market gaps, needs, pricing and profit margins for crops, livestock, and fisheries value chains in 2014. However, the anticipated trials based on results of the market study had not taken place. Baseline survey and situation analysis of artisanal fishers had been done. The

project had hired a consultant to execute activities under the PPPP action plan comprising 3 steps: (i) assessment of farmer's/fishers and their livestock/crop/fish production capacity and preparation of production plan to meet the targeted market demand from identified hotels and other buyers; (ii) Organisation of a business workshop with the potential buyers to exchange/discuss practical modalities for engaging business (products quality, quantities and volume needed, consistency of delivery and seasonality of products, transportation and delivery to the buyers, post-harvest handling, presentation and packaging, sanitation & safety standards and price); (iii) Technical and logistical support to farmers /fishers to improve their production and productivity on the targeted food crops, livestock and fishing product and engage the business relations with buyers. The first two stages have been engaged so far. The project identified 3 clusters with a total of 40 business oriented small scale crop farmers to engage in the PPP and a cluster of 10 artisanal fishers.

## **Sub-Component 1.2: Food Security and Productivity Development**

### **Output 1.2a): Improving Food Security by Promoting Home Gardens**

37. *The assessment of this output is moderately satisfactory.* The mission noted that the project had acquired inputs and equipment in 2014 and sales of equipment and agricultural inputs to registered commercial farmers and backyard gardeners were ongoing with an outreach of 345 against a target of 928 (37% achievement). The acquisition and restocking of agricultural inputs and equipment at SAA requisition store had not been done in 2015 because of payment delays. Development of a data base to monitor the purchase of equipment (small garden tools) and agricultural inputs by backyard farmers had been done but the data base developed was not functioning well. Information from farmers indicated that there appeared to be inconsistency in the availability of critical inputs and supplies which affected productivity at farm level. This made installation of the database a priority to ensure monitoring of inventory.

38. *Although there had been on-going support from the Government Department of Information and Communication Technology to improve SAA software, the mission recommends that CLISSA should consider outsourcing the development and installation of the software to a private consulting firm. The management of the database should be left to SAA for sustainability.*

### **Output 1.2b) Demonstration and sensitization of Farmers/Backyard Gardeners in Selected Agricultural Techniques**

39. *The assessment of this output is moderately satisfactory.* The project had planned sensitization of household's gardeners through audio and video spots and 12 (50% achievement) audio and video documentaries had been aired. The project had also carried out one (1) set of demonstration and sensitization materials on selected agricultural techniques and achievement of 50%. However, the planned demonstrations and sensitization of farmers in agricultural techniques in crops and livestock had not been done. Audio, TV and Print media sensitization had been carried out and demonstration material prepared for peri-urban farming.

40. *The mission recommends that CLISSA continue with promotional campaigns and sensitization with special focus on encouraging more youth and women to engage in agriculture. The project should focus more on small scale commercial farmers. An impact study of CLISSA intervention on backyard gardeners is needed to decide the level of the project engagement to support this specific group.*

### **Output 1.3c) Promotion of Peri-urban Farming**

41. *The mission rated the assessment of this output as satisfactory.* The project identified and adopted nine technologies (100% achievement) suitable for peri-urban farmers including: soil preparation; sowing; irrigation; planting containers; plant protection; harvesting; aerial planting; plant nutrition and plant propagation. The project had developed suitable demonstration materials to sensitize backyarders on the adopted technologies (100% achievement). Training of Trainers for extension officers at the Galilee Institute was put off due to high costs of training. 275 backyard gardeners had been trained on peri-urban farming techniques by a consultant hired by the project against a target of 400 (68% achievement).



42. *The mission recommends that CLISSA continue with the training of commercial farmers on farming techniques based on the adopted technologies with focus on the most motivated farmers. To get more farmers to participate, promotional campaigns need to be intensified.*

43. *The mission also noted that the referencing to peri-urban farmers is ambiguous and proposes the use of the generic name of backyard farmers or small scale commercial farmers where relevant.*

44. *The mission recommends that a selected group of about 40 lead farmers participate in the proposed Training of Trainers Course on Crop production techniques, Post-harvest technologies and marketing at CIRAD. This would ensure greater outreach in the adoption of technologies identified since the capacity of SAA is already stretched. Besides, these farmers would act as models to be emulated by other farmers.*

45. *The mission encourages CLISSA to pursue partnership with CIRAD for the ToT of SAA extension officers and beneficiary farmers as a cost effective alternative to training at Galilee Institute.*

Agreed action	Responsibility	Agreed date
6. <i>Evaluate economic viability of identified farm technologies prior to the large scale promotion. Include criteria on internationally accepted quality, health, environmental and security standards.</i>	PMU/Coordinator	June 2016
7. <i>Link the training needs to operational interest of participant such as market requirements to attract more farmers to the trainings. Explore new training approaches such as on-site/on-farm training.</i>	PMU/Coordinator	Immediate and continuous
8. <i>Establishment closer collaboration with the Seychelles Maritime Academy to offer practical trainings for fishers at sea.</i>	PMU/Coordinator	30 April 2016
9. <i>Carry out a study on supply and demand opportunities for the selected farmer clusters and ensure the follow up of results of the Agri-business forum for farmers and buyers in order to effectively establish the expected business arrangements.</i>	PMU/Coordinator	30 June 2016
10. <i>Provide support to the Fishermen and Boat Owners Association (FBOA) on their branding initiative in partnership with ISPC for sale of fish produce from about 50 artisanal fishers in Mahe (La Providence).</i>	PMU/Coordinator	30 June 2016
11. <i>Continue the production of promotional documentaries with special focus on encouraging more youth and women to take up crop farming and fishing activities.</i>	PMU/Coordinator	30 September 2016
12. <i>Carry out an impact study of CLISSA intervention on backyard gardeners to decide the level of the project engagement to support this specific group.</i>	PMU/Coordinator	31 July 2016
13. <i>Outsource the development and installation of the SAA software to a private consulting firm. The management of the database should be left to SAA for sustainability.</i>	PMU/Coordinator	31 May 2016
14. <i>Ensure that a selected group of about 40 lead farmers participate in the proposed Training of Trainers Course on Crop production techniques, Post-harvest technologies and marketing at CIRAD.</i>	PMU/Coordinator	31 July 2016

## **B. Component 2: Improving Access to Agricultural and Rural Finance**

46. The objective of this component is to provide the financial services required for transforming the ailing agricultural sector and removing access constraints for smaller farmers, producers, fishers and rural micro entrepreneurs to finance.

47. The activities are structured around two subcomponents:

- (i) *Sub-component 2.1 – refinancing fund.* It introduces a line of credit to provide refinancing to agricultural, fisheries and rural micro enterprise. This sub-component was to be implemented with two banks with a strategic view on agricultural revival and adequate experience in rural development financing.

- (ii) *Sub-component 2.2 – complementary support to participating banks.* Through activities under this subcomponent, the necessary training and management development support will be provided in order to make the agricultural revival a viable proposition for banks in the Seychelles.

48. The mission noted that the cumulative level of disbursements for this component as of 31 December 2015 stands at a very low 3% (respectively 0% for sub *component 2.1 – Refinancing fund* and 60% for sub *component 2.2 – Training and Technical Assistance for Bank transformation*). It was decided in November 2015 to cancel the Line of credit (LoC) / Refinancing fund (USD 1,078 million) at the request of the MFA, which explains this low level of disbursement.

49. Expenses made under Sub component 2.2 were mainly consultancies fees for studies for a total amount of USD 36,000. These studies were carried out as preparatory activities for implementation of the LoC, and activities initially planned at design have not been implemented (training of loan officers and support for transformation of DBS), resulting in a 0% rate of physical execution.

50. Regarding cancellation of the LoC, the June 2015 supervision mission noted that some of the proposals made for its management were not aligned to IFAD best practices, and it recommended that (i) the LoC be structured as loan funds rather than a grant; (ii) commercial interest rates be applied instead of subsidized rates (iii) the management of the LoC be done in the main balance sheet of participating financial institutions and, (iv) the PMU carry out the credit demand survey for the use of the LoC, which was done in August – October 2015 as well as a due diligence report on the two identified banks for partnership (DBS and SCB) in September 2015.

51. However, discussion later engaged by the MFA with DBS, expected to be the main recipient of the LoC, concluded that DBS was hesitant to put the funds for the LoC on its books as they already had a tight limit on the loans they could generate. Moreover, existence of several Government subsidized schemes would entail high probability that the LoC would not be used if priced at market interest rates as per IFAD policy. In this context, the MFA requested IFAD to examine the possibility of reallocating the fund earmarked for the LoC to the other two technical components, mainly to finance other public goods to benefit the smallholders.

52. As a follow up on the request by MFA for the reallocation of the Sub component 1 resources, an IFAD mission took place from 23 to 28 November 2015, whose conclusions endorsed by the MFA, were as follows:

a) *CLISSA line of credit is not justified in the current context of Seychelles financial sector.* A line of credit would indeed be justified in a situation where lack of liquidity in the financial sector would negatively affect access to finance by small scale farmers and artisanal fishermen. The finding of the mission was that liquidity is indeed not an issue in the context of Seychelles, in particular since the Government has set up several schemes aiming at facilitating access to finance by CLISSA target: (i) the Agricultural Development Fund (ADF) targeting agriculture sector including small scale farmers; (ii) the Small and Medium Enterprise (SME) incentive and guarantee scheme, targeting SMEs in various sectors including agriculture and fisheries, and, (iii) Small Business Financing Agency (SBFA) targeting cottage industries and other small businesses<sup>2</sup>. Past evidence is that farmers or fishers complying with lending conditions have indeed never or rarely been denied access to funding because of lack of liquidity, and the mission assumed that enough resources would be available through ADF and SME schemes to satisfy the demand, not counting possible access through SBFA and ordinary commercial loans.

b) *Another factor justifying irrelevance of CLISSA line of credit is the fact that farmers and fishers can access loans with well below market interest rates and are very sensitive to interest rate level.* The mission therefore confirmed the view of the MFA that the line of credit if implemented would not be used if priced at market rates.

c) *The mission noted the high level of commitment of the Government to sustain subsidized schemes, and promote access to finance for the agriculture and fishery sectors.* Historical analysis shows that Seychelles government policy to subsidize loans for agriculture and fishers is in place since more than 20 years through ADF and more recently through SME incentive scheme, and Government has recently increased the ADF fund and set up SME Plus scheme. It can therefore be reasonably stated

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<sup>2</sup> FDF (Fishery Development Fund) is another subsidized fund managed by DBS but it targets mostly semi industrial fisheries, not targeted by CLISSA.

that current environment justifying irrelevance of the line of credit will remain similar in the coming years and until the completion of the Project. It could therefore be reasonably stated that current environment justifying irrelevance of the line of credit will remain similar in the coming years and until the completion of the Project.

d) *However, the follow up mission noted that challenges remain to be addressed to ensure access to finance by target groups.* The challenges are mostly (i) the perception by the banks that the agricultural and fishery sectors are very risky and they are reluctant to venture into these sectors and (ii) high level of collateral requirement and generally non-adapted financial products on offer by the banks. *Although the follow up mission concluded to reallocate the bulk of the line of credit budget for sub component 3.2, it was also recommended in this context to maintain and reinforce capacity building support related to access to finance both on the supply side for the banks and on the demand side for the target groups.*

**53. Main lessons learnt through this process.** In the specific context of Seychelles where the Government is politically committed and has the financial capacity to maintain subsidized loan and/or insurance<sup>3</sup> schemes and where the banks do not have appetite as well as specific expertise to deal with an agricultural portfolio, main support from IFAD Project should focus on two things:

(i) “derisking” the small scale and artisanal fishery sectors and make them credible for the banks. This can be done through actions aiming at increasing and securing production, and securing and increasing revenues through win – win market linkages, as planned under the other two components of CLISSA, and

(ii) raising the appetite of the Banks to finance agriculture through studies and capacity building of the Banks in terms of developing agricultural financing strategies, products and processes, based on a value chain approach.

54. This support is expected to contribute in the short term to increase the share of the subsidized schemes going into small scale farming and artisanal fishery sectors, and in the medium term to facilitate access to financing of farmers and fishers on commercial basis by the banks when the subsidized schemes are discontinued.

55. The concept and methods of financial literacy as applied in continental Africa do not apply in this context, where the needs of the farmers and fishers are mostly to be able to develop bankable professional business plans acceptable by the banks, to maintain reliable records on their business which is one of the requirements of the banks, and to strengthen their knowledge of the financial products on offer to be able to make the right investment choices.

### **Proposed Orientations and activities for the remaining period**

56. Based on the lessons learnt above and meetings held during the mission with targeted beneficiaries and Banks<sup>4</sup>, the MTR recommends the following activities to be implemented for the remaining Project period in terms of capacity building on supply and demand side:

a) On the supply side, under component 3.1:

- Since the banks requested to have a clear understanding of the sectors and profile of the small scale farmers and artisanal fishermen targeted, especially on the profitability of their business, *it is recommended to complement the baseline studies already implemented with a more detailed and quantified analysis of the profitability of the small scale farming and artisanal fishery, by categories of farmers and type of value chains, by 30 June 2016.*
- *Contribute to the funding of a workshop to be organized by Central Bank in 2016 to build capacity of the interested banks in agricultural lending, with objective to provide these lending institutions with the skills needed to better understand the agricultural sector and minimize risk in agricultural lending.* Training could be delivered by a local or foreign technical service provider to be identified in consultation with the Central Bank, on a cost sharing basis with the

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<sup>3</sup> ADFIS (Agricultural Disaster and Fisheries Voluntary Insurance Scheme) is an insurance scheme started in 2014 being implemented by SAA for farmers and SFA for fishers in partnership with SACOS insurance company, with premium subsidized at 50% by the Government. Evaluation of the scheme will be done by the end of 2016 for further improvements.

<sup>4</sup> The meeting was organized by the Central Bank and attended by Bank of Baroda, Bank Al Habib Ltd, Habib Bank Ltd, DBS, BMI, Barclays Bank, Nouvobanq, SCB.

banks (at least 40%). Participants would be Banks senior managers and representatives of Central Bank, Ministry of Finance, MFA, SAA and SFA. Main topics to be addressed during the workshop would be: (i) understanding of the agricultural and artisanal fishery sectors, including specific financial needs and constraints; (ii) development of tailored and cash flow based products, including value chain financing approaches involving contractual linkages between farmers and off takers, which would hopefully result in reduced interest rates; (iii) operational processes to deliver the products and monitor the clients; (iv) profile and training needs of loan officers and other staff; (v) specific risk management policy; and (vi) linkages with insurance schemes promoted by the Government and private sector.

b) On the demand side, under component 1:

- *Ensure that specific and adapted modules related to: (i) business records; and (ii) understanding of the financial services on offer are inserted in the agribusiness development training.* Local service providers selected for business development support should be able to insert these modules in their offer.

Agreed action	Responsibility	Agreed date
15. Develop under component 3.1 – Strategic capacity strengthening the following non-lending financial activities:		
(i) Detailed and quantified analysis of the profitability of the small scale farming and artisanal fishery, by categories of farmers and type of value chains, to complement the existing baseline studies.	PMU/Coordinator	30 June 2016
(ii) Support a workshop to be organized by Central Bank of Seychelles to build capacity of the interested banks in agricultural lending, with objective to provide these lending institutions with the skills needed to better understand the agricultural sector and minimize risk in agricultural lending		31 July 2016
(iii) Under component 1, ensure that specific and adapted modules related to (i) business records and (ii) understanding of the financial services on offer are inserted in the agribusiness development training planned	PMU/Coordinator	31 July 2016

### **C. Component 3: Strategic capacity strengthening and infrastructure**

57. The objective of this component is to: (i) provide the necessary and complementary public goods that will enable the implementation of component 1; and (ii) prepare the exit strategy of the project in terms of institutional continuity. The strategy is to strengthen public sector institutions and build infrastructure for delivering the required public goods and meet the requirements of promoted agricultural and fishing activities. The main activities include: (i) strategic capacity strengthening where relevant institutions will be supported through human resource capacity building, equipment and limited infrastructure development, aligned to the work of other financing partners; and (ii) financing public and public rural infrastructure (irrigation/water harvesting, etc.), which are related to activities of Component 1.

#### **Sub-component 3.1 - Strategic capacity of selected public sector institutions strengthened.**

58. *The mission rated the level of implementation of this sub-component moderately unsatisfactory.* The mission noted general delays in implementation of activities resulting into a level of realization of 36% against a cumulative target of 88% set at end of year 2 in the PDR.

59. As human and institutional capacity development are still highly relevant to the Seychelles context as reflected in the Seychelles National Agriculture Investment Plan (SNAIP), *the MTR mission recommends that these activities be detailed and reviewed to meet the demand of the targeted institutions and to be aligned with the priorities identified in the SNAIP.*

#### **Proposed orientations for the remaining project period**

60. Besides continuing with the technical trainings and the provision of relevant equipment (including e.g. cold storage and small equipment for farm mechanization) for trials at SAA's research stations and training institutions (SIAH and SMA), the mission recommends that the following key areas be considered as priority for the remaining period of time of CLISSA's intervention: *(i) a training programme undertaken by CIRAD for SAA staff and including progressive farmers in the areas of agronomy, business planning and marketing of agricultural produce; (ii) capacity strengthening for the newly established Irrigation and Drainage Section of the SAA; (iii) acquisition of GIS equipment with installation of a GIS server, and training at SAA and PMU; (iv) capacity building on irrigation water distribution, conflicts resolution and Water Users Associations for SAA extension staff; (v) capacity building for bank managers and officers on agricultural lending (residual activity under the original credit Component of CLISSA); (vi) provision of small equipment for farm mechanization to enable the SAA provide a rental service to interested farmers at the Anse Boileau premises (to be upgraded through Sub Component 3.2), based on a detailed proposal and management plan for the service to be prepared by SAA; (vii) specific support to strengthen the capacity of farmers and fishers associations through: (a) a technical and organizational audit of the 3 to 4 main associations; (b) the development of partnership with the associations that will be found viable based on the result of the above audit, through the support for the preparation and implementation of their business plan; and (viii) in line with the original design of the CLISSA, the project will also support SIAH in developing new curricula to tailor its offer and focus on farmers' and extension agents' needs.*

61. *The MTR mission also recommends that the PMU should establish an effective monitoring system in partnership with the institutions receiving CLISSA support to ensure effective follow up of progress in implementation and uptake of good practices by beneficiaries for sustainable use of the facilities provided.*

#### **Sub-component 3.2 - Public and collective rural infrastructure**

62. *The mission rated the level of implementation of this sub-component satisfactory* as CLISSA's infrastructure investments planned in 2015 have been implemented substantially in line with the AWPB. The overall scope of the works implemented includes the rehabilitation of 3 de-centralized requisite stores (in Mahe and Pralin) and upgrading of 3 irrigation schemes in Mahe. In addition, CLISSA-supported construction works are ongoing at a road site in Helvetia - Mahe (started in 2015). An additional irrigation scheme in Pralin (Cap Samy) is about to start, pending the signing of the civil

works contract under processing. The aggregate amount of the on-going and ready contracts (including design and supervision) is about USD 300,000, of which about USD 270,000 will come from IFAD Loan funds.

63. On the basis of the above evaluation, the mission noted an excess amount of USD 170,000 against the original project Financing Plan already engaged to cover investments under Sub-Component 3.2. *The mission draws the addition of the PMU on this situation which reveals a lack of effective monitoring of the project budget.* However, the reallocation of IFAD loan funds proposed by the MTR will be able to: (i) offset the current shortfall of funding and, (ii) scale up project interventions based on lessons learned and best practices.

64. The MTR mission visited 3 sites where CLISSA has invested in the development of road and irrigation facilities as well as 5 potential sites proposed by SAA for up scaling CLISSA's support for irrigation and 3 for improvement of access roads. Overall, while noting that the quality of the completed works is acceptable, *the MTR mission recommends that prioritization of infrastructure investments should be based on effectiveness and efficiency criteria. This may be achieved through: i) fostering synergies among the CLISSA components (namely Value Chain development, farmers trainings and identified market opportunities under Component 1); and ii) basic cost-benefit analysis to guide the selection of the areas of CLISSA infrastructures investments in the field.*

65. The mission however noted that in the specific context of Seychelles, the limited availability of contiguous farmland makes investments in collective facilities relatively expensive due to the low number of farmers having direct access to any identified facility (be it roads or irrigation).

#### **Proposed orientations for the remaining project period**

66. Based on field visits findings, subsequent technical meetings at the SAA and in order to improve the efficiency and effectiveness, *the MTR mission recommends that future investments in public and collective infrastructure (mainly roads and irrigation systems) under CLISSA project be concentrated on the three clusters of Grand Anse plain (Pralin); Valle D'Andor and Anse Boileau (Mahe).*

67. The mission noted that investments in upgrading the existing irrigation infrastructure in these three areas have the potential to serve up to about 85 ha reaching out about 140 registered farmers , i.e. about 20% of the Seychelles' farmers. Improved access to water would allow beneficiary farmers to increase cropping intensities (up to 300%) and trigger own private investments (e.g. for shade houses and drip lines). Moreover, "progressive" registered farmers in these areas have been already engaged in CLISSA's activities to support marketing and the consolidation of the respective agricultural value chains; this will increase the prospects for the fast uptake of good practices from neighbouring farmers.

68. The indicative budget for the full upgrading of the three irrigation schemes identified for CLISSA future interventions is estimated to about USD 350,000 (including VAT). *The MTR recommends the development of a comprehensive design of the irrigation schemes (as opposed to spot upgrades).* To this effect, the hydraulic calculations will be based on the survey of all the existing lines and on an assessment of the potential of each source feeding the piped system, while the current and projected water demand will be calculated based on Crop Water Requirements<sup>5</sup>. The proposed interventions in these schemes would include: (i) the upgrade of intake sites (including upstream gabion dykes at sites preliminarily identified in the Agriculture Sector Development Study (ASDS), but yet to be further assessed in terms of discharge and reliability); (ii) replacement/reinforcement of the Ductile Iron gravity main pipes with larger diameter durable Polyethylene pipes; (iii) installation of filtering units in main lines; (iv) increasing the distribution network inter connections to equalize pressure and access to irrigation across the command area; (v) piloting the use of check structures on drains to be used for storage; and (vi) installation of water meters.

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<sup>5</sup> Information of net cropping area and types of crops available from the May 2015 census which is to be imported in the SAA GIS system. The designers will be also required to provide an assessment of farmers' incomes based on crop budgets and detailed cropping patterns at each scheme to benchmark the income level in the before project scenario.

69. *The mission also recommends that the design (and supervision) of the upgrading of the irrigation schemes be contracted out in 2016 as a single package to a professional engineering consulting firm as per applicable procurement procedures.* Following the outcomes of the design, including the costing of alternative technical options, the tender for civil works will be launched early 2017. This will allow starting the works at the onset of the 2017 construction season.

70. CLISSA will support future investments in access roads in the same three districts selected for the upgrading of irrigation schemes, primarily targeting the plots at higher elevation that would not benefit from the investment in irrigation. The key criteria to be applied for the identification of the road sections to be rehabilitated will include: i) number of farmers and farming area served; ii) private investment leveraged (e.g. in water tanks or irrigation equipment); and iii) estimated reduction of transport cost considering the aggregate total volume of production. *In light of the limited traffic volumes, the MTR mission recommends that CLISSA applies a minimum standards and a spot improvement approach. This will include the construction of both longitudinal and cross drainage structures and double strip or full concrete paving only in steep slopes sections. Based on these standards, CLISSA support will be limited to a maximum of USD 40,000/km. In case of a proposed upgrading to higher standards and paving options, the project would work in liaison with the road authority for technical advice and leverage funding. The total allocation made available for the rehabilitation of farm roads under CLISSA after the MTR would not exceed USD 100,000 including VAT.*

71. The mission also noted that the rehabilitation of 3 de-centralized requisite stores supported by the CLISSA is reportedly already ensuring a more timely supply of agricultural inputs in the farming areas of Grand Anse-Amitie (Pralin), Valle D'Andor and Union Vale (Mahe). The coverage of the requisite stores will be completed with the construction of a new unit at Grand Anse (Mahe), which is prioritized in the SNAIP and for which a detailed design has been already prepared by the SAA which is exploring opportunities for financing its construction. *In light of its strategic location (serving 5 districts) and its intended function as rental/workshop to service agricultural equipment the MTR mission recommends that the construction works (valued at about USD 150,000 including VAT) be supported by CLISSA.*

72. The timeline set for the implementation of civil works under Component 3.2 is to complete all the civil works by end 2017. This will allow CLISSA being operational during the defects liability period and for at least one year of observations during the life of the project, to extrapolate on relevant medium-term-impacts of investments e.g. on changed cropping patterns and farmers' incomes. *The MTR mission recommends that the monitoring function of the PMU be strengthened through capacity building and enhanced coordination with the GIS unit at SAA.* The long term sustainability of these interventions will be supported by the programme through dedicated complementary capacity building activities for SAA staff lined up under Sub-Component 3.1.

Agreed action	Responsibility	Agreed date
16. <i>Detail and review the human and institutional capacity development activities to meet the demand of the targeted institutions and to be aligned with the priorities identified in the SNAIP</i>	PMU/Coordinator	30 June 2016
17. <i>Consider the following key areas as priority for the remaining period of time of CLISSA's intervention:</i>		
(i) <i>training of SAA staff by CIRAD and including progressive farmers in the areas of agronomy, business planning and marketing of agricultural produce;</i>	PMU/Coordinator	Continuous
(ii) <i>capacity strengthening for the newly established Irrigation and Drainage Section of the SAA;</i>		
(iii) <i>acquisition of GIS equipment with installation of a GIS server, and training at SAA and PMU;</i>		
(iv) <i>capacity building on irrigation water distribution, conflicts resolution and Water Users Associations for SAA extension staff;</i>		

Agreed action	Responsibility	Agreed date
(v) <i>provision of small equipment for farm mechanization to enable the SAA provide a rental service to interested farmers at the Anse Boileau premises based on a detailed proposal and management plan for the service to be prepared by SAA,</i>		
(vi) <i>specific support to strengthen the capacity of farmers and fishers associations through: (a) a technical and organizational audit of the 3 to 4 main associations; (b) the development of partnership with the associations that will be found viable based on the result of the above audit, through the support for the preparation and implementation of their business plan;</i>		
(vii) <i>Support to SIAH in developing new curricula to tailor its offer and focus on farmers' and extension agents' needs.</i>		
18. <i>Strengthen the monitoring function of CLISSA PMU in the domain of collective and public infrastructures and enhanced coordination with the GIS unit at SAA.</i>	PMU/Coordinator	30 September 2016
19. <i>Concentrated future investments in public and collective infrastructure (mainly roads and irrigation systems) on the three clusters of Grand Anse plain (Pralin); Valle D'Andor and Anse Boileau (Mahe).</i>	PMU/Coordinator	Immediate and continuous
20. <i>Develop a comprehensive design of the irrigation schemes (as opposed to spot upgrades): the hydraulic calculations will be based on the survey of all the existing lines and on an assessment of the potential of each source feeding the piped system, while the current and projected water demand will be calculated based on Crop Water Requirements.</i>	PMU/Coordinator	30 August 2016
21. <i>Ensure that the design and supervision of the upgrading of the irrigation schemes be contracted out as a single package to a professional engineering consulting firm as per applicable procurement procedures.</i>	PMU/Coordinator	Immediate
22. <i>Support the construction of a new requisite stores at Grand Anse (Mahe), as prioritized in the SNAIP</i>	PMU/Coordinator	2017

## D. Component 4 – Project Management

### Project Implementation

73. At design, it was indicated that to facilitate implementation, a Project management unit (PMU) would be embedded with the Office of the Principal Secretary in Ministry in charge of Agriculture. The Monitoring & Evaluation (M&E) would also be mainstreamed in the Ministry in charge of agriculture and the National Bureau of Statistics and make use, as far as possible, of existing mechanisms for generating knowledge regarding the well-being of the project's target groups. For knowledge management, a communication unit was to be strengthened at the level of the Ministry in charge of agriculture in order to enhance visibility of CLISSA and its knowledge management.

74. **Project staffing.** The mission noted that the PMU is currently fully staffed as planned with a Programme coordinator, an M&E specialist, a Procurement specialist and a part time Project accountant seconded by the MFA. After the resignation of the first project coordination, the former M&E officer was appointed to the post project coordinator in March 2015 and a new M&E officer was also recruited in the same period. Overall assessment of the mission is positive regarding capacities, knowledge of the targeted economic sectors and involvement of the PMU staff. The mission however is concerned about the delays in processing of accounting document which the PMU attributes to the engagement of the dedicated staff to other responsibilities within the MFA. *The mission brings this situation to the attention of the MFA to provide adequate solution.*

75. **Staff remuneration and DSA.** The attention of the MTR mission was drawn to the fact that the salary level and DSA rates applicable during duty travel under CLISSA was not aligned to the rates applied for other privately recruited PMU staffs working under the National Implementation Modalities (NIM) for similar donors funded project such as UNDP. *The mission recommends that the MFA*



*examines this situation and makes a proposal for IFAD consideration and no objection taking into consideration performance criteria.*

**76. Technical working groups (TWG).** The mission noted that less than half of the planned meetings of the TWG have taken place during the reporting period under consideration with scheduling difficulties blamed for shortfall. *The mission brings this situation to the attention of the MFA to provide adequate solution.*

**77. Steering committee.** The MTR mission was not able to confirm that steering committee meeting took place as planned as no minutes of the meetings was available. However, the mission understood that members were not always available or invited to attend the meetings. *The mission draws the attention of the MFA on the respect of financing agreement covenant concerning the project implementation manual which indicates 2 steering committees meeting in the year, one for the clearance of the AWPB and the other for its Mid-term evaluation.*

**78. Monitoring and Evaluation.** The mission noted that significant progress has been made in developing the M&E framework notably the input data in the M&E system, the finalisation of the baseline study for farmers and the engagement of baseline studies for fishers. However, the mission found that CLISSA indicators are not disaggregated by gender and there is no reporting on outcomes. The Mission with propose a revised logframe of the project to better capture the expected outcomes.

**79.** *The mission recommends the M&E officer should propose gender targets for the RIMS indicators in close collaboration with IFAD in order to ensure reporting on the project in gender-sensitive manner.*

**80.** *Considering difficulties encountered by the project in collecting reporting data from the implementing partners (SAA and SFA) the mission recommends that the PMU carry out regular field monitoring visits to discuss with prospective beneficiaries, as well as field staff of implementing agencies the progress made and collect useful qualitative and quantitative feedback/information to populate the M&E system.*

**81. Gender.** The initial design document highlighted the relatively high levels of relative poverty among female-headed households and indicated that special efforts will be made to encourage the members of female-headed families to become engaged in CLISSA project promoted activities. However, the mission noted that the Project M&E system does not keep records on gender-disaggregated outputs, outcomes and impact indicators which are essential to monitor its outreach to women. *The mission recommends that gender-disaggregated indicators should be developed for all CLISSA activities. Specific measures should also be taken to encourage the participation of women in training sessions, and their representation in Technical Working Groups, especially among backyard gardeners were most women headed households are found.*

**82. Project implementing partners.** The mission noted the low responsiveness of the implementing agencies (SAA and SFA) attributed to insufficient staffing in the field, high workload at senior management level including for the management of various partnerships with other donors, and lack of involvement in the AWPB preparation (mostly for the first year). This situation has led the Project to outsource part of the activities to service providers.

**83. Sustainability.** Although CLISSA PMU is specific, the project is fully embedded in the MFA. CLISSA's main implementation partners (SAA and SFA) government institution who have the mandate of providing technical support and the investments needed for farmers to carry out their activities in the agriculture and fisheries sector. As such, CLISSA's exit strategy is already ensured through its institutional set up. The construction of all collective infrastructures under CLISSA is submitted to approval by the Ministry in charge of Environment who is in charge of evaluating their impact on the Environment and their alignment to the overall plan for the development of such infrastructure in a particular area. As CLISSA seeks to promote business arrangement between farmers/fishers and buyers and, the need to develop beneficiaries entrepreneurial skills *the mission recommends that partnership with private sector operators and other services providers along the value chain be promoted to ensure sustainability of CLISSA results.*

**84. Knowledge management, innovation and scaling up.** CLISSA is engaged in setting up an innovative approach through the organization of farmers and fishers in to functional clusters that will serve as a platform for the provision of integrated technical supports, investment needed to development farming business and fishing activities (including processing and branding) and establishing consistent business partnership with buyers. *The mission recommends that a knowledge*

*management specialist should be mobilized to follow up and capture the knowledge generated in this operation for dissemination and scaling up.*

### **Fiduciary aspects**

85. **Financial management.** The mission noted a number of strong elements in the CLISSA financial management set up. These include the controls through the centralized payment by the office of the Controller General at the Ministry of Finance. At project level, the Visual Accounting Mate (VAM) accounting software has been well coded to reflect Programme Components, expenditure categories and financiers. Key reports still need to be presented by the IT specialist by calling up the system parameters.

86. The mission noted delays in payment processing. In the post MTR period, the following improvements are recommended:

- *the CLISSA Programme accountant will maintain a tracking system to monitor payment processes and identify cases of delays along the approving chain between the PCU, Ministry in charge of Finance (MoF) project accountant, Controller General, and Central Bank. MoF has confirmed that the problem of payments will be processed in a standard 5 - 10 days and proactive planning will be needed for any cash advances.*
- *The PMU project accountant will be included on the distribution list to allow access to information for reconciliations of the VAM accounting system. It is important for Ministry of Finance to be providing payment advices as they are received from the central bank and the monthly bank statements. The PMU as of the time of mission had not yet received bank statements for January and February creating a bank reconciliation backlog.*

87. **Disbursement including initial advance:** As of 29 February 2016, IFAD loan is 18.71% disbursed through four withdrawal applications, with SDR 1.6 million (about USD 2.2 million). Cumulative disbursement from IFAD is USD 550,928. There is a WA in pipe of USD 279,692 that has been submitted to IFAD and once processed, this will increase disbursement to 29%. Firm commitments amount to USD 150,000 which once paid will raise disbursement to 34%. The rate of submission is less satisfactory, the last replenishment application has a cut-off date of 31 March 2015 while the next one has only been submitted in March 2016, one year later.

88. **Annual work plan and budget executions.** 2014 Budget of USD 1.12 million had actual use of 0.194 million (17%) and 2015 budget –USD 129,023 vs actual expenditure of USD 90,351 (70%).

89. The component expenditure trends stands as follows : Component 1 - Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers has absorbed USD 162,000, representing 10% of the total project budget and 15% of the planning period under review; Component 2 - Improving access to agriculture and rural finance has posted only USD 36,000 representing 3% of the total project budget and 5.17% of the planning period; Component 3 - Strategic capacity strengthening and infrastructure has absorbed USD 270,000 representing 43% of allocation at design and 52.43% of planned allocation for the period under review and, component 4 - Programme management has utilised USD 156,000 representing 45% of the allocation at design and 84.8% of the planned allocation for the period under the mid-term review.

90. **Designated account reconciliation:** The designated account as of 31 December 2015 was well reconciled as shown below. The USD 9,592 being taxes pre-financed from IFAD loan funds should be refunded back into the designated account.

**Table 1: Compressed designated account reconciliation as at 31 December 2015**

	<b>USD</b>
Designated account	110,275
WA in pipeline	280,133
Pre-financed taxes to be refunded	9,592
<b>Total advance</b>	<b>400,000</b>

91. **Counterpart funds:** The GoS counterpart contribution towards CLISSA as of 13 December 2015 was 38% (USD 108,000 of the appraisal target of USD 282,000). Significant civil works contracts have been silent on VAT which would have been the significant tax element in transactions. Therefore, it is possible that for VAT registered contractors, the Programme may have paid VAT as

part of the contract sums; however, there is no documentary evidence for this given that all bidding documents and contracts were silent as to whether or not the contract sums were inclusive of VAT (15%). However, instead, the Project has treated withholding tax (5%) deducted from suppliers, contractors and service providers. However, withholding tax is a method of collecting income tax by deductions from supplies/ service providers/ contractors incomes and is not a tax paid by the project given that the ultimate burden is on the payee. Such deductions are, therefore, eligible for inclusion in withdrawal applications to IFAD.

92. **SOE spot check:** The original documents are maintained by the Ministry of finance which is the paying point. The Project, however, maintains copies of supporting documents. The MTR mission did a spot check on WA 2, 4 and 5 and confirms the existence of the underlying supporting documents.

93. **Procurement:** The Project employs a dedicated procurement officer. Every AWPB (2014, 2015 and draft for 2015) has a procurement plan in the standard templates. In the post MTR period, the procurement plan should be used as a performance tracking measure through updating the progressing achievement of procurement milestones. Overall the procurement guidelines applicable by the GoS are followed. However, the mix-up of consultancies into the works procurement plan will need to be avoided given that services and works follow different procurement methods and processes.

94. **Contract Management:** This will need to be strengthened further in the post MTR period. The following cases of gaps in contract management have been noted by the MTR mission:

- a) Expired contracts but still with ongoing works or service delivery e.g, D & C CONSTRUCTION- Road Construction, Helvetia, La Misere expired on 21 December 2015 and yet works are on-going, and SGM and Partners- Assessment of Farmers/Fishers to establish Market Links with Buyers expired on 31 December 2015 and yet assignment is still on-going.
- b) The procurement officer has also been doubling as a technical contract manager. The user departments or implementing specialists should assign technical contract managers to certify works or deliverables as opposed to such tasks only to procurement officer.
- c) Performance bonds are not obtained which puts the Project at a risk in event of contract performance failure.
- d) Advances to contractors have been paid without bank guarantees,
- e) The contract register is currently maintained in Microsoft word files with inconsistencies to contract monitoring forms. In the post MTR period, the contract register should be maintained in excel with formula links to the contract monitoring forms.

95. **Audit:** The Project has so far undergone one external audit by the office of the Auditor General for the year ended 31 December 2014. The result was unqualified opinion with a number of management recommendations that the project has endeavoured to implement. The audit for 2015 is slated to start March/ April 2016 well on schedule.

**Loan covenants:** Apart from delayed submission of AWPB and irregular steering committee meetings, the Project is being implemented in compliance with the financing agreement covenants.

Agreed action	Responsibility	Agreed date
23. <i>The MFA should provide adequate solution on the following issues; (i) delays in processing of accounting document which the PMU attributes to the engagement of the dedicated staff to other responsibilities within the MFA; (ii) scheduling difficulties and weak performance of the TWG; (iii) Steering committees meeting not held as indicated in financing agreement.</i>	MFA	30 April 2016
24. <i>The MFA should the salary structure and DSA rate of CLISSA privately recruited National staff for alignment to condition being applied by development partners funded project such as UNDP. The proposal shall be submitted to IFAD for consideration and no objection.</i>	MFA	30 June 2016
25. <i>M&amp;E officer should propose gender targets for the RIMS indicators in close collaboration with IFAD in order to ensure reporting on the project in gender-sensitive manner.</i>	M&E officer/Coordinator	Immediate

Agreed action	Responsibility	Agreed date
26. <i>Promote partnership with private sector operators and other services providers along the value chain to ensure sustainability of CLISSA results.</i>	PMU/Coordinator	Continuous
27. <i>PMU to carry out regular field monitoring visits to discuss with prospective beneficiaries, as well as field staff of implementing agencies the progress made and collect useful qualitative and quantitative feedback/information to populate the M&amp;E system.</i>	PMU/Coordinator	Continuous
28. <i>Mobilize a knowledge management specialist to follow up and capture the knowledge generated in the PPPP initiative for dissemination and scaling up.</i>	M&E with support from Coordinator	30 August 2016
29. <i>Maintain a tracking system to monitor payment processes and identify cases of delays along the approving chain between the PCU.</i>	Accountant	Continuous

## V. Proposal for reallocation of IFAD fund and project planning from mid-term review to closure

### Reallocation of IFAD fund

96. On the basis of the recommendation and analysis of the MTR review, the mission proposes the following reallocation to be made:

Table 2: Reallocation of IFAD funds by Category (in '000 SDR)\*

CATEGORY Description	IFAD only pre-MTR activities	Total Post MTR activities	Total Pre-and post MTR activities	IFAD as per design	Reallocation To/ (From)	Actual situation
Authorised allocation	-	-	-	-	-	-
Civil works	171	546	716	548	168	716
Vehicles and Equipments	0.97	561	562	17	545	562
Technical assistance	132	415	547	498	49	547
Credit	-	-	-	594	(594)	-
Salaries and allowance	67	88	155	118	37	155
Operation Costs	0.57		1	7	(6)	1
Unallocated	-		-	198	(198)	-
<b>TOTAL</b>	<b>371</b>	<b>1,610</b>	<b>1,980</b>	<b>1,980</b>	<b>0</b>	<b>1,980</b>

*N.B.* Activities under the category “Vehicles and equipment” are found in subcomponent 1.1 and 3.1. The specific activities are: Equipment for Communication Unit; Demonstration Equipment for SIAH; Rehabilitation of nurseries and equipment A.B. research station; Small Agricultural Equipment (mechanization) for research station; Kits for quality Control (for Livestock unit SAA); Rehab of Training facility/Lab and Workshop at SMA; Equipment for SIAH (mechanization); GIS Server at SAA + Handheld GPS SAA and PMU; Small farm Equipment for rental service at Grande Anse; Equipment (hydroponic at Research station); Investment support for value chain operation and equipment for improving food safety

**Table 3: Reallocation of IFAD funds by Component (in '000 SDR)**

#	PROJECT COMPONENTS	IFAD only pre-MTR activities	Total Post MTR activities	Total Pre-and post MTR activities	IFAD as per design	Reallocation To/ (From)	Actual situation
1	Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	96	519	615	713	(98)	615
2	Improving Access to Agricultural and Rural Finance					-	
2.1	Refinancing funds	-	-	-	711	(711)	-
2.2	Training and Technical assistance	21	-	21	40	(19)	21
3	Strategic capacity strengthening and infrastructure					-	-
3.1	Strategic capacity strengthening	24	457	481	329	152	481
3.2	Public and collective infrastructure	152	546	698	65	633	698
4	Programme Management, KM, and M&E	78	88	165	122	43	165
				-	-	-	-
		371	1,610	1,980	1,980	-	1,980

Exchange rates Used: In financing agreement, 1 SDR = 1.52 USD; Average rate in pre-MTR period, 1 SDR = 1.40 USD; Estimated rate for post MTR period, 1 SDR = 1.41 USD.

### Project cost and financing plan from MTR to Closure

97. **Available balances from MTR to closure of CLISSA.** The available IFAD funds from MTR to closure of CLISSA equals to the equivalent of USD 2.25 million as presented in the table below:

**Table 4: Situation of IFAD funds available as from MTR (USD)**

Source	Original currency	Amount in original currency	Exchange rate	USD
IFAD	SDR	1,609,598	1.4	2,253,437

98. **Summary cost table for post MTR priorities.** The total Programme investment and incremental recurrent costs, including price contingencies, are estimated at USD 3.449 million of which IFAD Funds amount to USD 2.25 million as indicated in the table above.

99. The table below presents a breakdown of CLISSA post MTR costs by components and sub-components. In the Post-MTR period, the investment in Component 1, Enhancement business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers, totals USD 1.5 million while Component 3, strategic capacity strengthening and infrastructure, accounts for USD 1.3 million. In the post MTR period, Programme Management accounts for USD 0.232 million.

**Table 5: Summary cost table by component: From MTR to the Closure of CLISSA**

Seychelles

Competitive Local Innovations for small-Scale Agriculture Project

**Components Project Cost Summary**

	(SCR '000)			(US\$ '000)		
	Local	Foreign	Total	Local	Foreign	Total
A. Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	20,560	-	20,560	1,504	-	1,504
<b>B. Improving Access to Agricultural and Rural Finance</b>						
Refinancing funds	-	-	-	-	-	-
Training and Technical assistance	-	-	-	-	-	-
<b>Subtotal</b>	-	-	-	-	-	-
<b>C. Strategic capacity strengthening and infrastructure</b>						
Strategic capacity strengthening	8,211	-	8,211	601	-	601
Public and collective infrastructure	9,497	-	9,497	695	-	695
<b>Subtotal</b>	17,708	-	17,708	1,295	-	1,295
D. Programme Management, KM, and M&E	3,158	8	3,166	231	1	232
<b>Total BASELINE COSTS</b>	41,426	8	41,434	3,030	1	3,031
Physical Contingencies	1,365	0	1,365	100	0	100
Price Contingencies	9,032	2	9,034	318	0	318
<b>Total PROJECT COSTS</b>	51,823	11	51,834	3,448	1	3,449

100. Financing Plan. The details of financing arrangements are shown in the tables below.

**Table 6: Financing Plan by Components and by financiers (USD'000): From MTR to the Closure of CLISSA**

Seychelles

Competitive Local Innovations for small-Scale Agriculture Project

**Components by Financiers**

(US\$ '000)

Components by Financiers (US\$ '000)	Private									
	IFAD		Companies		Producers		Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	725	41.4	139	7.9	107	6.1	781	44.6	1,752	50.8
<b>B. Improving Access to Agricultural and Rural Finance</b>										
Refinancing funds	-	-	-	-	-	-	-	-	-	-
Training and Technical assistance	-	-	-	-	-	-	-	-	-	-
<b>Subtotal</b>	-	-	-	-	-	-	-	-	-	-
<b>C. Strategic capacity strengthening and infrastructure</b>										
Strategic capacity strengthening	639	95.6	-	-	-	-	29	4.4	668	19.4
Public and collective infrastructure	763	100.0	-	-	-	-	-	-	763	22.1
<b>Subtotal</b>	1,402	97.9	-	-	-	-	29	2.1	1,431	41.5
D. Programme Management, KM, and M&E	123	46.1	-	-	-	-	144	53.9	266	7.7
<b>Total PROJECT COSTS</b>	2,249	65.2	139	4.0	107	3.1	954	27.7	3,449	100.0

**Table 7: Financing plan by components and by Year – Totals Including Contingencies**

Seychelles

Competitive Local Innovations for small-Scale Agriculture Project

**Project Components by Year -- Totals Including Contingencies**

(US\$ '000)

	Totals Including Contingencies					
	2014	2015	2016	2017	2018	Total
A. Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	-	-	499	671	581	1,752
<b>B. Improving Access to Agricultural and Rural Finance</b>						
Refinancing funds	-	-	-	-	-	-
Training and Technical assistance	-	-	-	-	-	-
<b>Subtotal</b>	-	-	-	-	-	-
<b>C. Strategic capacity strengthening and infrastructure</b>						
Strategic capacity strengthening	-	-	437	191	40	668
Public and collective infrastructure	-	-	261	502	-	763
<b>Subtotal</b>	-	-	698	693	40	1,431
D. Programme Management, KM, and M&E	-	-	128	131	7	266
<b>Total PROJECT COSTS</b>	-	-	1,325	1,496	628	3,449

## VI. Update of CLISSA project financial and economic analysis

101. There are many opportunities for import substitution in Seychelles with benefits largely stemming from reduction in costs related to import fees. The models used in updating the financial and economic analysis have been based on CLISSA baseline survey data and MTR field visits (eggplant, papaya and piggery). The MTR mission has also made use of the feasibility studies done by ISPC on the feasibility of reducing the costs of importing vegetables and fresh herbs in Seychelles. The results in ISPC feasibility study are extremely impressive but it is appreciated that such a level of sophistication may not be achieved by the CLISSA target beneficiaries. Even if the target beneficiaries manage to achieve 30% of the ISPC production sophistication, the result would be still be profitable with a beneficiary farmer with a 0.8 acre plot able to increase income by around SCR 128,406 on average.

**Table 8: Summary of profitability of vegetable production in Seychelles (per acre)**

Crop	CIF cost /kg (SRN)	Adjustment factor to farm gate price (SCR)	Farm gate price (kgs)	Yield rate as per ISPC study (kgs/sq meter)	Yield per acre (Kgs/acre)	30% of expected yield	Production cost/kg	Gross margin/kg (SCR)	Net income / acre SCR
Egg plant					9,778			-	201,880
Papaya					15,476			-	281,562
Cucumber	57.57	0.75	43.18	18	72,828	21,848	40.7	2.48	54,162
Tomatoes A+47	60.24	0.75	45.18	18.75	75,863	22,759	39.07	6.11	138,942
Wide tomatoes	86.88	0.75	65.16	18	72,828	21,848	40.7	24.46	534,346
Cherry tomatoes	131.28	0.75	98.46	7	28,322	8,497	104.78	-	53,758
Roman tomatoes	58.76	0.75	44.07	18.75	75,863	22,759	43.07	1.00	22,736
Green papers	66.60	0.75	50	12	48,552	14,566	47.80	2.15	104,193
Simple average									160,508

but on average each farmer has 0.8 acres = 128,406

102. **Beneficiaries:** As already indicated in the overall analysis of CLISSA implementation performance, the initial targeting of the project was over ambitious. The Mid-term review mission therefore recommended that the targeting figures should be revised to consider 40% of each targeted population giving the following numbers: 261 market oriented small farmers; 532 artisanal fishers and 3200 backyard gardeners.

103. **Direct beneficiaries used in the updated of the financial and economic analysis.** While CLISSA can target the above beneficiaries, the quantifiable benefits largely are a combination of capacity building and irrigation investments. In total it is planned that 89 hectares will be put under irrigation as per the indicative schemes below serving about 153 households.

**Table 9: Area to be put under irrigation through CLISSA investments**

#	Items	Beneficiaries (HH)	HA	km	YEAR of Implementation
1	Irrigation Concrete tank at Cap Samy Praslin 5x10x2=70m3	10	5		2016
2	Upgrading of irrigation scheme Amitie/Cacao (Pralin)	70	44		2017
4	Upgrading of irrigation scheme Val D'andor	20	15		2017
5	Upgrading of irrigation scheme Anse Boileau	53	25		2017
			<b>89</b>		

**Table 10: Updated Financial Rate of Return (FIRR)**

<b>Results of Economic Analysis</b>					
Activity	PY1	PY2	PY3	PY4	PY5-20
<b>Market oriented small farmers</b>					
Adoption rate(%)	-	50	80	153	153
Adopting farmers	20%	30%	60%	90%	90%
Incremental income per farmer	-	15	48	138	138
Net income increase	128,406	128,406	128,406	128,406	128,406
	-	1,926,095	6,163,503	17,681,551	17,681,551
<b>Project economic cost (from COSTAB)</b>	9,040,000	17,065,175	11,527,020	17,065,175	
Farmers own capital investments- outside COSTAB		3,000,000	6,600,000	17,940,000	-
<b>Grand total net cash flow</b>	<b>- 9,040,000</b>	<b>- 18,139,080</b>	<b>- 11,963,517</b>	<b>- 17,323,624</b>	<b>17,681,551</b>
<b>NPV10(SCR)</b>	<b>36,309,636</b>				
<b>ERR (%)</b>	<b>22%</b>				

104. The estimation of the MTR mission is that the ERR at design of 21% (MTR estimate above is 22%) remains valid even with the adjustments proposed. It is emphasized that this is the minimum quantifiable level as there are many training benefits through SAA affecting even other sub-sectors such as fisheries and livestock that have not been included due to estimation difficulties.



## Appendix 1: CLISSA Project updated logical framework

Results Hierarchy	Key Indicators	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	Assumptions
<b>Goal:</b> to contribute to sustainable pro-poor economic growth and employment and resilience to external shocks and trends	Reduce incidence of child malnutrition by 20%(RIMS)	7.9% children of less than 5 years malnourished		6.3% Child malnutrition	RIMS impact surveys Baseline, final household survey	Y1 completion and	PMU	High level commitment from GoS and private sector operators
	% of economically active population working in the agriculture and fisheries sector	% of the target population		794 HH representing 40% of active population working in the agriculture and fisheries sector		Y1 completion and	PMU	
	Increase Households assets ownership by 20% (RIMS)	HH ownership assets respectively 66.17% and 25% for house and vehicle <sup>6</sup> .		HH ownership assets respectively 79.4% and 30% for house and vehicle.	final household survey	Y1 completion and	PMU	
<b>Development Objective:</b> promote modern and sustainable agricultural and fisheries practices to increase and diversify market access for the target group	Percentage of smallholder agricultural producers and fishers selling their produce and catch to tourism establishments	15% (2014) - (480 backyard gardeners; 39 Market oriented small farmers, and 80 artisanal fishers)	20%	40% (2018) - (3200 backyard gardeners; 261 Market oriented small farmers, and 532 artisanal fishers).	CLISSA M&E reports and GoS statistics.	Annual	PMU	Private sector operator willing to engage in PPP
<b>Outcome 1:</b> Smallholder farmers and fishers have capacity to identify and	% of smallholder farmers and fishers reporting challenges	60% (2014)	xxx	20% (2018)	CLISSA M&E reports and GoS statistics	Annual	PMU	Technical support from CLISSA

<sup>6</sup> National Bureau of Statistics, Seychelles in Figure, 2011 : Seychelles population and housing survey, 2010.

Results Hierarchy	Key Indicators	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	Assumptions
service market demand	in marketing their produce							implementing agencies timely provided
	Number of smallholder farmers and fishers adopting improved technologies	200 backyard gardeners;30 Market oriented small farmers, and 150 artisanal fishers	75 market Oriented farmers 125 artisanal fishers	3200 backyard gardeners;261 Market oriented small farmers, and 532 artisanal fishers	CLISSA M&E reports	Annual	PMU	
	Number of farmers reporting production/yield increase.	140 backyard gardeners; 40 Market oriented small farmers,	260 65	3200 backyard gardeners; 261 Market oriented small farmers.	CLISSA M&E reports	Annual	PMU	
<b>Output 1.1:</b> Capacity building and training of smallholder farmers and fishers	Number of smallholder farmers and fishers trained	0 (2014)	125 farmers 75 fishers	261 market Farmers; 3200 Backyard Gardeners 532 Fishers	CLISSA M&E reports and GoS statistics	Annual	PMU	
<b>Output 1.2:</b> Agricultural/fishery Public-Private-Producer-Partnerships (PPPPs) promoted	Number of PPPPs brokered	0(2014)	2	10	CLISSA M&E reports and GoS statistics	Annual	PMU	
<b>Outcome 2:</b> smallholder farmers and fishers have improved access to equitable financial services	15% increase of smallholder farmers and artisanal fishermen having access to loans from banks	27% of smallholder farmers and 23% of artisanal fishermen having access to loans from banks	xxx	42% of smallholder farmers and 38% of artisanal fishermen having access to loans from banks	CLISSA M&E reports and GoS statistics	Annual	PMU	Conducive economic and regulatory environment

Results Hierarchy	Key Indicators	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	Assumptions
<b>Output 2.1:</b> Options for supporting credit schemes through private banks assessed	Feasibility study of credit facility completed;  Capacity building of banks and non-financial stakeholders carried out	0  0		01 Feasibility study done.  10 banks and non-financial stakeholders trained.	CLISSA M&E reports and GoS statistics	Annual	PMU	
<b>Outcome 3:</b> Smallholder farmers and fishers have increased access to public services, technologies and collective infrastructure	% of market oriented smallholder farmers with access to water throughout the year	150 (2014)	250 (95.79%)	261(100%)	CLISSA M&E reports and GoS statistics	Annual	PMU	
<b>Output 3.1:</b> Capacity of public service institutions strengthened to support smallholder farmers and fishers	Number of public service institutions strengthened	0	4	12	CLISSA M&E reports and GoS statistics	Annual	PMU	
<b>Output 3.2:</b> Improved technologies for smallholder farmers and fishers	Number of market smallholder farmers, backyard gardeners and fishers trained improved agricultural/fishery practices	0	175 farmers 45 fishers	261 market Farmers; 3200 backyard gardeners 532 Fishers	CLISSA M&E reports and GoS statistics	Annual	PMU	
<b>Output 3.3:</b> Smallholder farmers have access to improved communal infrastructure	Land under irrigation schemes rehabilitated	0	170	261	CLISSA M&E reports and GoS statistics	Annual	PMU	

## Appendix 2: Revised Cost tables for CLISSA Project – Post-MTR

### Available balances at MTR

The available funds from MTR to closure of CLISSA equals to the equivalent of USD2.25 million as presented in the table below:

**Table 1: Status of available balances from MTR to the closure of CLISSA**

Source	Original currency	Amount in original currency	Exchange rate	USD
IFAD	SDR	1,609,598	1.4	2,253,437

The summary cost table for post MTR priorities is presented in the table below. The total project costs amounts to USD 3.4million of which IFAD Funds amount to USD 2.25 million.

**Table 2: Summary cost table by component: From MTR to the Closure of the CLISSA**

Table: Components Project Cost Summary

	(SCR '000)			(US\$ '000)		
	Local	Foreign	Total	Local	Foreign	Total
A. Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	20,560	-	20,560	1,504	-	1,504
<b>B. Improving Access to Agricultural and Rural Finance</b>						
Refinancing funds	-	-	-	-	-	-
Training and Technical assistance	-	-	-	-	-	-
<b>Subtotal</b>	-	-	-	-	-	-
<b>C. Strategic capacity strengthening and infrastructure</b>						
Strategic capacity strengthening	8,211	-	8,211	601	-	601
Public and collective infrastructure	9,497	-	9,497	695	-	695
<b>Subtotal</b>	17,708	-	17,708	1,295	-	1,295
D. Programme Management, KM, and M&E	3,158	8	3,166	231	1	232
<b>Total BASELINE COSTS</b>	41,426	8	41,434	3,030	1	3,031
Physical Contingencies	1,365	0	1,365	100	0	100
Price Contingencies	9,032	2	9,034	318	0	318
<b>Total PROJECT COSTS</b>	51,823	11	51,834	3,448	1	3,449

The total Programme investment and incremental recurrent costs, including price contingencies, are estimated at USD 3.449 million. The table above presents a breakdown of the costs by CLISSA post MTR components and sub-components. In the Post-MTR period, the investment in Component 1, Enhancement business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers, totals USD 1.5millionwhile Component 3, strategic capacity strengthening and infrastructure, accounts for USD 1.3 million. In the post MTR period, Programme Management accounts for USD 0.232 million.

## Financing Plan

In the post MTR period a financing plan shown in table 3. It includes the funds still available in IFAD and GoS funds .The details of financing arrangements are shown in Table 3.

**Table 3: Components by Financiers**

(US\$ '000)	IFAD		Private Companies		Producers		Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	725	41.4	139	7.9	107	6.1	781	44.6	1,752	50.8
<b>B. Improving Access to Agricultural and Rural Finance</b>										
Refinancing funds	-	-	-	-	-	-	-	-	-	-
Training and Technical assistance	-	-	-	-	-	-	-	-	-	-
<b>Subtotal</b>	-	-	-	-	-	-	-	-	-	-
<b>C. Strategic capacity strengthening and infrastructure</b>										
Strategic capacity strengthening	639	95.6	-	-	-	-	29	4.4	668	19.4
Public and collective infrastructure	763	100.0	-	-	-	-	-	-	763	22.1
<b>Subtotal</b>	1,402	97.9	-	-	-	-	29	2.1	1,431	41.5
D. Programme Management, KM, and M&E	123	46.1	-	-	-	-	144	53.9	266	7.7
<b>Total PROJECT COSTS</b>	2,249	65.2	139	4.0	107	3.1	954	27.7	3,449	100.0

## Pre and Post MTR expenditure comparison

The comparison of actual expenditure incurred, plus projected expenditures against the original allocations are presented in the table below. Reallocation has been done to reflect the priorities for the post MTR period

**Table 4: Reallocation for IFAD funds only- by component (SDR'000)**

#	PROJECT COMPONENTS	IFAD only pre-MTR activities	Total Post MTR activities	Total Pre-and post MTR activities	IFAD as per design	Reallocation To/ (From)	Actual situation
1	Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	96	519	615	713	(98)	615
2	Improving Access to Agricultural and Rural Finance					-	
2.1	Refinancing funds	-	-	-	711	(711)	-
2.2	Training and Technical assistance	21	-	21	40	(19)	21
3	Strategic capacity strengthening and infrastructure					-	
3.1	Strategic capacity strengthening	24	457	481	329	152	481
3.2	Public and collective infrastructure	152	546	698	65	633	698
4	Programme Management, KM, and M&E	78	88	165	122	43	165
				-	-	-	-
		371	1,610	1,980	1,980	-	1,980

**Table 5: Reallocation for IFAD funds only - by category (SDR'000)**

CATEGORY Description	IFAD only pre-MTR activities	Total Post MTR activities	Total Pre-and post MTR activities	IFAD as per design	Reallocation To/ (From)	Actual situation
Authorised allocation	-	-	-	-	-	-
Civil works	171	546	716	548	168	716
Vehicles and Equipments	0.97	561	562	17	545	562
Technical assistance	132	415	547	498	49	547
Credit	-	-	-	594	(594)	-
Salaries and allowance	67	88	155	118	37	155
Operation Costs	0.57		1	7	(6)	1
Unallocated	-		-	198	(198)	-
<b>TOTAL</b>	<b>371</b>	<b>1,610</b>	<b>1,980</b>	<b>1,980</b>	<b>0</b>	<b>1,980</b>

Exchange rate used in financing agreement: 1 SDR=USD 1.52  
Average rate so in pre-MTR period: 1 SDR=USD 1.40  
Estimated rate for post MTR period: 1 SDR= USD 1.41

### Summary post MTR Cost Tables

**Table: Project Components by Year -- Totals Including Contingencies**

**Table 6: Components Project Cost Summary**

Seychelles

Competitive Local Innovations for small-Scale Agriculture Project

#### Components Project Cost Summary

	(SCR '000)			(US\$ '000)		
	Local	Foreign	Total	Local	Foreign	Total
A. Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	20,560	-	20,560	1,504	-	1,504
<b>B. Improving Access to Agricultural and Rural Finance</b>						
Refinancing funds	-	-	-	-	-	-
Training and Technical assistance	-	-	-	-	-	-
<b>Subtotal</b>	-	-	-	-	-	-
<b>C. Strategic capacity strengthening and infrastructure</b>						
Strategic capacity strengthening	8,211	-	8,211	601	-	601
Public and collective infrastructure	9,497	-	9,497	695	-	695
<b>Subtotal</b>	17,708	-	17,708	1,295	-	1,295
D. Programme Management, KM, and M&E	3,158	8	3,166	231	1	232
<b>Total BASELINE COSTS</b>	41,426	8	41,434	3,030	1	3,031
Physical Contingencies	1,365	0	1,365	100	0	100
Price Contingencies	9,032	2	9,034	318	0	318
<b>Total PROJECT COSTS</b>	51,823	11	51,834	3,448	1	3,449

**Table 7: Components Project Cost Summary by Year – Totals Including Contingencies**

	Totals Including Contingencies					
	2014	2015	2016	2017	2018	Total
(US\$ '000)						
A. Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	-	-	499	671	581	1,752
<b>B. Improving Access to Agricultural and Rural Finance</b>						
Refinancing funds	-	-	-	-	-	-
Training and Technical assistance	-	-	-	-	-	-
<b>Subtotal</b>	-	-	-	-	-	-
<b>C. Strategic capacity strengthening and infrastructure</b>						
Strategic capacity strengthening	-	-	437	191	40	668
Public and collective infrastructure	-	-	261	502	-	763
<b>Subtotal</b>	-	-	698	693	40	1,431
D. Programme Management, KM, and M&E	-	-	128	131	7	266
<b>Total PROJECT COSTS</b>	-	-	1,325	1,496	628	3,449

**Table 8: Expenditure Accounts by Financiers**

	IFAD		Private		Producers		Government		Total	
			Companies							
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
(US\$ '000)										
<b>I. Investment Costs</b>										
<b>A. Vehicles, Equipments and Goods</b>										
Vehicles	-	-	-	-	-	-	-	-	-	-
Equipment & goods	784	55.3	139	9.8	107	7.6	388	27.4	1,418	41.1
<b>Subtotal</b>	784	55.3	139	9.8	107	7.6	388	27.4	1,418	41.1
B. Civil Work /a	763	100.0	-	-	-	-	-	-	763	22.1
<b>C. Technical Assistance</b>										
Service Providers & Studies	262	82.2	-	-	-	-	57	17.8	318	9.2
Training and Workshops	319	46.6	-	-	-	-	365	53.4	684	19.8
<b>Subtotal</b>	580	57.9	-	-	-	-	422	42.1	1,002	29.1
D. Credit	-	-	-	-	-	-	-	-	-	-
<b>Total Investment Costs</b>	2,127	66.8	139	4.4	107	3.4	810	25.5	3,183	92.3
<b>II. Recurrent Costs</b>										
A. Salaries & Allowances	123	47.3	-	-	-	-	137	52.7	259	7.5
B. Operation and Maintenance	-	-	-	-	-	-	7	100.0	7	0.2
<b>Total Recurrent Costs</b>	123	46.1	-	-	-	-	144	53.9	266	7.7
<b>Total PROJECT COSTS</b>	2,249	65.2	139	4.0	107	3.1	954	27.7	3,449	100.0

/a Includes cost of on-farm investment and infrastructure development

**Table 9: Expenditure Accounts Project Cost Summary**

	(SCR '000)			(US\$ '000)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
<b>I. Investment Costs</b>								
<b>A. Vehicles, Equipments and Goods</b>								
Vehicles	-	-	-	-	-	-	-	-
Equipment & goods	16,732	-	16,732	1,224	-	1,224	-	40
<b>Subtotal</b>	16,732	-	16,732	1,224	-	1,224	-	40
<b>B. Civil Work /a</b>	9,497	-	9,497	695	-	695	-	23
<b>C. Technical Assistance</b>								
Service Providers & Studies	3,897	-	3,897	285	-	285	-	9
Training and Workshops	8,141	-	8,141	596	-	596	-	20
<b>Subtotal</b>	12,038	-	12,038	881	-	881	-	29
<b>D. Credit</b>	-	-	-	-	-	-	-	-
<b>Total Investment Costs</b>	38,268	-	38,268	2,799	-	2,799	-	92
<b>II. Recurrent Costs</b>								
A. Salaries & Allow ances	3,084	-	3,084	226	-	226	-	7
B. Operation and Maintenance	74	8	83	5	1	6	10	-
<b>Total Recurrent Costs</b>	3,158	8	3,166	231	1	232	-	8
<b>Total BASELINE COSTS</b>	41,426	8	41,434	3,030	1	3,031	-	100
Physical Contingencies	1,365	0	1,365	100	0	100	-	3
Price Contingencies	9,032	2	9,034	318	0	318	-	10
<b>Total PROJECT COSTS</b>	51,823	11	51,834	3,448	1	3,449	-	114

\a Includes cost of on-farm investment and infrastructure development



**Table 10: Expenditure Accounts by Components - Base Costs**

(US\$ '000)	Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers	Improving Access to Agricultural and Rural Finance		Strategic capacity strengthening and infrastructure		Programme Management, KM, and M&E	Total	Physical Contingencies	
		Refinancing funds	Training and Technical assistance	Strategic capacity strengthening	Public and collective infrastructure			%	Amount
<b>I. Investment Costs</b>									
<b>A. Vehicles, Equipments and Goods</b>									
Vehicles	-	-	-	-	-	-	-	-	-
Equipment & goods	962	-	-	262	-	-	1,224	5.0	61
<b>Subtotal</b>	962	-	-	262	-	-	1,224	5.0	61
B. Civil Work /a	-	-	-	-	695	-	695	-	-
<b>C. Technical Assistance</b>									
Service Providers & Studies	129	-	-	156	-	-	285	2.3	6
Training and Workshops	413	-	-	183	-	-	596	3.5	21
<b>Subtotal</b>	542	-	-	339	-	-	881	3.1	27
D. Credit	-	-	-	-	-	-	-	-	-
<b>Total Investment Costs</b>	1,504	-	-	601	695	-	2,799	3.2	88
<b>II. Recurrent Costs</b>									
A. Salaries & Allow ances	-	-	-	-	-	226	226	5.0	11
B. Operation and Maintenance	-	-	-	-	-	6	6	5.0	0
<b>Total Recurrent Costs</b>	-	-	-	-	-	232	232	5.0	12
<b>Total BASELINE COSTS</b>	1,504	-	-	601	695	232	3,031	3.3	100
Physical Contingencies	75	-	-	13	-	12	100	-	-
<b>Price Contingencies</b>									
<b>Inflation</b>									
Local	360	-	-	113	141	47	661	-	-
Foreign	-	-	-	-	-	0	0	-	-
<b>Subtotal Inflation</b>	360	-	-	113	141	47	661	-	-
Devaluation	-187	-	-	-58	-73	-24	-343	-	-
Subtotal Price Contingencies	173	-	-	55	68	23	318	3.3	10
<b>Total PROJECT COSTS</b>	1,752	-	-	668	763	266	3,449	3.2	110
Taxes	96	-	-	29	-	-	125	4.8	6
Foreign Exchange	-	-	-	-	-	1	1	4.8	0

/a Includes cost of on-farm investment and infrastructure development

**Table 11: Expenditure Accounts by Years -- Base Costs**

(US\$ '000)

	Base Cost					
	2014	2015	2016	2017	2018	Total
<b>I. Investment Costs</b>						
<b>A. Vehicles, Equipments and Goods</b>						
Vehicles	-	-	-	-	-	-
Equipment & goods	-	-	463	463	298	1,224
<b>Subtotal</b>	-	-	463	463	298	1,224
B. Civil Work /a	-	-	242	452	-	695
<b>C. Technical Assistance</b>						
Service Providers & Studies	-	-	197	53	35	285
Training and Workshops	-	-	179	230	187	596
<b>Subtotal</b>	-	-	376	283	222	881
D. Credit	-	-	-	-	-	-
<b>Total Investment Costs</b>	-	-	1,081	1,198	520	2,799
<b>II. Recurrent Costs</b>						
A. Salaries & Allow ances	-	-	111	111	4	226
B. Operation and Maintenance	-	-	2	2	2	6
<b>Total BASELINE COSTS</b>	-	-	1,194	1,311	526	3,031
Physical Contingencies	-	-	37	38	25	100
<b>Price Contingencies</b>						
<b>Inflation</b>						
Local	-	-	192	304	164	661
Foreign	-	-	0	0	0	0
<b>Subtotal Inflation</b>	-	-	192	304	164	661
Devaluation	-	-	-98	-158	-86	-343
Subtotal Price Contingencies	-	-	94	146	78	318
<b>Total PROJECT COSTS</b>	-	-	1,325	1,496	628	3,449
Taxes	-	-	48	48	29	125
Foreign Exchange	-	-	0	0	0	1

\a Includes cost of on-farm investment and infrastructure development

## Detailed Post MTR Cost Tables

**Table 12. Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers**

### Detailed Costs

(US\$)

(US\$)	Unit	Quantities					Unit Cost	Base Cost ('000)						
		2014	2015	2016	2017	2018		Total	2014	2015	2016	2017	2018	Total
I. Investment Costs														
A. Value chain development														
1. Preparation of a PPP action plan /a	Lumpsum							-	-	15	15	-	30	
2. Business to business facilitation /b	Lumpsum							-	-	10	10	16	36	
3. Quality assurance of selected products /c	Lumpsum							-	-	10	6	6	22	
4. Training and skill development /d	Lumpsum							-	-	75	90	90	255	
5. Investment support for value chain operation /e	Lumpsum							-	-	245	340	250	835	
6. Value chain operation /f	Lumpsum							-	-	4	20	20	44	
7. Communication and promotion campaigns /g	Lumpsum							-	-	6	8	5	19	
8. Recovery set	unit	-	-	5	5	5	15	5,000	-	-	25	25	25	75
Subtotal									-	-	390	514	412	1,316
B. Promoting innovative and green farming and fisheries practices														
1. Investment Support and Training in Climate Smart Farming														
Capacity building in technology adoption /h	Lumpsum								-	-	30	30	40	100
2. Identify Technology Packages /i	Lumpsum								-	-	20	30	30	80
3. Assistance for improving food security /j	Lumpsum								-	-	2	3	3	8
Total									-	-	442	577	485	1,504

\a Need assessment of value chain actors, capacity assessment of suppliers, description of a detailed action plan

\b Workshops to bring together marketers with producers / groups, local traders / w wholesalers. SAA and SFA will undertake agric & fisheries respectively

\c Training and awareness on quality control

\d Detailed training classes to farmers & w wholesalers on the production process, good technologies, quality improvement methods, costing & budgeting etc

\e Equipment unit(s) demanded by the value chain operators such as storage, grading and chilling facilities

\f Value chain operators will invest in managing the chain

\g Project support to create an awareness on "buy Seychellois", "proudly Seychellois"

\h Provided by public institutions such as SAA and SFA

\i Financing trials if needed

\j Supporting backyard gardening for food security

**Table 13. Strategic capacity strengthening**

Detailed Costs (US\$)		Quantities						Unit	Base Cost					
	Unit	2014	2015	2016	2017	2018	Total	Cost	2014	2015	2016	2017	2018	Total
<b>I. Investment Costs</b>														
<b>A. Strategic Capacity Strengthening</b>														
<b>1. Equipments</b>														
a. Equipment for Communication Unit /a	set	-	-	20,000	-	-	20,000		-	-	20,000	-	-	20,000
b. Demonstration Equipment for SIAH/b	set	-	-	3,406	-	-	3,406		-	-	3,406	-	-	3,406
c. Rehabilitation of nurseries and equipment A.B. research station	set	-	-	22,000	-	-	22,000		-	-	22,000	-	-	22,000
d. Small Agricultural Equipment (mechanization) for research station	set	-	-	43,308	-	-	43,308		-	-	43,308	-	-	43,308
e. Kits for quality Control (for Livestock unit SAA)	set	-	-	7,800	-	-	7,800		-	-	7,800	-	-	7,800
f. Rehab of Training facility/Lab and Workshop at SMA	set	-	-	65,000	-	-	65,000		-	-	65,000	-	-	65,000
g. Equipment for SIAH (mechanization)	set	-	-	20,000	-	-	20,000		-	-	20,000	-	-	20,000
h. GIS Server at SAA + Handheld GPS SAA and PMU	set	-	-	5,500	-	-	5,500		-	-	5,500	-	-	5,500
i. Small farm Equipment for rental service at Grande Anse (Mahe)	set	-	-	-	60,000	-	60,000		-	-	-	60,000	-	60,000
j. Equipment (hydroponic at Research station)	set	-	-	-	15,000	-	15,000		-	-	-	15,000	-	15,000
<b>Subtotal</b>		-	-	187,014	75,000	-	262,014		-	-	187,014	75,000	-	262,014
<b>2. Training</b>														
a. Familiarization visit PMU staff	Ls	-	-	5,000	-	-	5,000		-	-	5,000	-	-	5,000
b. Hydroponic and fertigation (10 SAA staff)	Ls	-	-	11,538	-	-	11,538		-	-	11,538	-	-	11,538
c. Training for Communication staff at Ministry (3 staff)	Ls	-	-	5,000	-	-	5,000		-	-	5,000	-	-	5,000
d. Training on GIS for SAA staff and PMU staff ( 5 people)	Ls	-	-	-	2,000	-	2,000		-	-	-	2,000	-	2,000
e. Exchange Programme for SAA Irrigation&Drainage Engineer (Gal Inst 2 w weeks)	Ls	-	-	-	20,000	-	20,000		-	-	-	20,000	-	20,000
f. Training for SAA Irrigation&Drainage Tech overseas (regional 2 w weeks 2 people)	Ls	-	-	-	10,000	-	10,000		-	-	-	10,000	-	10,000
g. Training Package by CIRAD (14 staff + 14 farmers)	Ls	-	-	-	60,000	-	60,000		-	-	-	60,000	-	60,000
h. Revise SIAH Curricula - w workshop	Ls	-	-	-	2,000	-	2,000		-	-	-	2,000	-	2,000
i. Revise SIAH Curricula - ToT (2 staff) D (14 staff + 14 farmers)	Ls	-	-	-	-	10,000	10,000		-	-	-	-	10,000	10,000
j. Training SAA Extension officers on WUAs/Wat management (5 Ext officers regional)	Ls	-	-	-	-	25,000	25,000		-	-	-	-	25,000	25,000
k. Study on Profitability and Risk of Small Scale Farming and Fisheries	Ls	-	-	12,000	-	-	12,000		-	-	12,000	-	-	12,000
l. Workshop for Bank Managerses	Ls	-	-	20,000	-	-	20,000		-	-	20,000	-	-	20,000
<b>Subtotal</b>		-	-	53,538	94,000	35,000	182,538		-	-	53,538	94,000	35,000	182,538
3. Technical and Organizational Audit of Farmers Organizations	Per Association	-	-	9,100	-	-	9,100		-	-	9,100	-	-	9,100
4. Trainings for FBOA	Per Association	-	-	20,000	-	-	20,000		-	-	20,000	-	-	20,000
5. Logistics support to setup a fishing auction centre at La providence	Per Association	-	-	60,000	-	-	60,000		-	-	60,000	-	-	60,000
6. Initial cost for the Fishers provision store	Per Association	-	-	60,000	-	-	60,000		-	-	60,000	-	-	60,000
7. Fisher participation to the fishing trade fair	Per Association	-	-	7,000	-	-	7,000		-	-	7,000	-	-	7,000
<b>Total</b>		-	-	396,652	169,000	35,000	600,652		-	-	396,652	169,000	35,000	600,652

\a MNRI Communication unit

\b Fridge, chiller, washing facility, scales, crates

**Table 14. Public and collective infrastructure**

Detailed Costs (US\$)	Unit	Quantities						Unit Cost	Base Cost					
		2014	2015	2016	2017	2018	Total		2014	2015	2016	2017	2018	Total
I. Investment Costs														
A. Works														
1. Grande Anse (Mahe) requisite sore and mechanich workshop/rental service	No	-	-	1	-	-	1	145,985	-	-	145,985	-	-	145,985
2. Concrete tank at Cap Samy Praslin 5x10x2=70m3	No	-	-	1	-	-	1	51,207	-	-	51,207	-	-	51,207
3. Design for selected road sections in Val D'Endor, Anse Boileau, Pralin (Amitie)	No	-	-	1	-	-	1	8,000	-	-	8,000	-	-	8,000
4. Spot improvements on farm roads in Val D'Endor, Anse Boileau, Pralin (Amitie) @USD 40,000/km	No	-	-	-	1	-	1	80,000	-	-	-	80,000	-	80,000
5. Design & supervision works for irrigation investments in 2017 (incl Daw n Dew ) @10% of consi	No	-	-	1	-	-	1	37,232	-	-	37,232	-	-	37,232
6. Upgrading of irrigation scheme Amitie/Cacao (Pralin)														
Construction of gabion dyke	No	-	-	-	1	-	1	40,000	-	-	-	40,000	-	40,000
Construction of intake structure	No	-	-	-	1	-	1	40,000	-	-	-	40,000	-	40,000
Replacement of 400m of 4"DI pipe with 500m 140mm PE	No	-	-	-	1	-	1	24,150	-	-	-	24,150	-	24,150
Installation of vortex/filter on 3 gravity mains	No	-	-	-	1	-	1	6,000	-	-	-	6,000	-	6,000
Interconnections in distribution netw ork (using 400m DI pipes from the cacao line)	No	-	-	-	1	-	1	18,400	-	-	-	18,400	-	18,400
Construction of n.5 check structures on drains	No	-	-	-	1	-	1	15,000	-	-	-	15,000	-	15,000
Installation of n.75 water meters @100 each	No	-	-	-	1	-	1	7,500	-	-	-	7,500	-	7,500
Installation of n.3 meter on gravity mains @800USD each	No	-	-	-	1	-	1	2,400	-	-	-	2,400	-	2,400
Subtotal									-	-	-	153,450	-	153,450
7. Upgrading of irrigation scheme Val D'andor														
Construction of intake structure and sump	No	-	-	-	1	-	1	20,000	-	-	-	20,000	-	20,000
Installation of submersible pump	No	-	-	-	1	-	1	5,000	-	-	-	5,000	-	5,000
Extension of power line 100m	No	-	-	-	1	-	1	5,000	-	-	-	5,000	-	5,000
Procurement and installation of 110mm PE rising main	No	-	-	-	1	-	1	19,665	-	-	-	19,665	-	19,665
Interconnections in distribution netw ork (using 450m PE pipes from the old rising main)	No	-	-	-	1	-	1	20,700	-	-	-	20,700	-	20,700
Installation of n.25 water meters @250 each	No	-	-	-	1	-	1	2,500	-	-	-	2,500	-	2,500
Installation of n.1 meter on gravity mains @800USD each	No	-	-	-	1	-	1	800	-	-	-	800	-	800
Subtotal									-	-	-	73,665	-	73,665
8. Upgrading of irrigation scheme Val D'andor														
Construction of n.1 gabion dyke	No	-	-	-	1	-	1	40,000	-	-	-	40,000	-	40,000
Rehabilitation of n.3 of intake structures	No	-	-	-	1	-	1	15,000	-	-	-	15,000	-	15,000
Replacement of 1000m of 4"DI pipe with 1000m 140mm PE	No	-	-	-	1	-	1	48,300	-	-	-	48,300	-	48,300
Installation of vortex/filter on 2 gravity mains	No	-	-	-	1	-	1	6,000	-	-	-	6,000	-	6,000
Interconnections in distribution netw ork (using 500m DI pipes from the old line)	No	-	-	-	1	-	1	23,000	-	-	-	23,000	-	23,000
Installation of n.75 water meters @100 each	No	-	-	-	1	-	1	5,300	-	-	-	5,300	-	5,300
Installation of n.2 meters on gravity mains @800USD each	No	-	-	-	1	-	1	1,600	-	-	-	1,600	-	1,600
Construction of n.2 check structures on drains	No	-	-	-	1	-	1	6,000	-	-	-	6,000	-	6,000
Subtotal									-	-	-	145,200	-	145,200
Total									-	-	242,424	452,315	-	694,739

**Table 15. Programme management**

Detailed Costs														
(US\$)														
Unit	Quantities						Unit	Base Cost ('000)						
	2014	2015	2016	2017	2018	Total	Cost	2014	2015	2016	2017	2018	Total	
II. Recurrent Costs														
A. Salaries and Allowances														
National Programme Coordinator /a	month	-	-	12	12	-	24	3,500	-	-	42	42	-	84
Procurement officer	month	-	-	12	12	-	24	2,000	-	-	24	24	-	48
M&E officer	month	-	-	12	12	-	24	2,000	-	-	24	24	-	48
Programme Finance Specialist /b	month	-	-	12	12	-	24	850	-	-	10	10	-	20
Incremental Cost for Specialists (SAA & SFA) /c	month	-	-	12	12	-	24	100	-	-	1	1	-	2
Support Staff /d	month	-	-	12	12	-	24	450	-	-	5	5	-	11
DSA Allowances	Lumpsum								-	-	3	3	3	9
Honorarium for the meetings /e	Lumpsum								-	-	1	1	1	3
Subtotal									-	-	111	111	4	226
B. Operation and Maintenance														
Other equipments	Lumpsum								-	-	2	2	2	6
PMU Office Rent	Unit	-	-	12	12	12	36	1	-	-	0.01	0.01	0.01	0.04
Total									-	-	113	113	6	232

\a Transferred from GOS and placed at the PS level

\b Government staff

\c Government staff

\d Two office assistants for assisting the PMU staff

\e Programme steering committee meetings

**Table 16: Disbursements by Semesters and Government Cash Flow**

(US\$ '000)	Financing Available				Costs to be		
	Private			Total	Financed	Government	
	IFAD	Companies	Producers		Project Costs	Cash Flow	Cumulative Cash Flow
	Amount	Amount	Amount				
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	471	16	14	501	662	-162	-162
6	471	16	14	501	662	-162	-324
7	512	29	22	563	748	-185	-509
8	512	29	22	563	748	-185	-693
9	142	25	17	184	314	-130	-824
10	142	25	17	184	314	-130	-954
Total	2,249	139	107	2,495	3,449	-954	-954

## Appendix 3: Technical notes for component 1: Enhancing business arrangements through capacity development of small farmers, rural micro entrepreneurs and fishers

### 5.1: Lessons learnt and proposed implementation strategy

#### a) Key Lessons Learnt

The implementation of Component 1 activities was delayed as a result of reliance of SAA, SFA and SENPA. These public agencies have faced capacity challenges which cause delays in project implementation. Besides, these institutions were not always fully involved in the preparation of the project AWPB in the period up to MTR. There is need to include these public agencies in the preparation of the AWPB for 2016. It was also learnt that PMU needs to involve technical staff of implementing agencies in planning of project activities in addition to the management teams of the implementing agencies.

PMU should also consider outsourcing certain activities to private, national or international agencies and consultants in order to ensure timely implementation of project activities since the level of staffing of these institutions does not allow them to always respond timely to the needs of CLISSA project. Indeed, the project has already registered some success by use of private consultants' to implement the training of backyard gardeners. The consultant was hired to develop the training materials and to conduct the trainings. The trainings were held at district level and many beneficiaries were in attendance. A key lesson in this training was that decentralizing of training had a positive effect to drawing more farmers to the training and this needed to be complemented with advertisements and sensitization in print, radio and TV.

#### b) Proposed Strategy

The first phase of implementation of sub-components 1.1 and 1.2 has produced important building blocks that are considered as critical factors of success in the post-mid-term of the project. However, a lot remains to be done to achieve the objectives of this component. In order to come up with proposed strategies, the key constraints, opportunities in the agricultural and fisheries value chains in Seychelles have been highlighted as below.

#### Constraints, Opportunities and Strategies Matrix for Agriculture and Fisheries Value Chains

a) Fruits and Vegetables Value Chain	Current Constraints	Current Opportunities	Proposed Strategy
i) <b>Production:</b> (Constraints, opportunities and solutions)	<ul style="list-style-type: none"> <li>Low mechanization;</li> <li>Limited usage of inputs like fertilizers, pesticides and manure;</li> <li>Use of poor quality seeds;</li> <li>Production motivated by own consumption and as hobby;</li> <li>Limited technical support;</li> </ul>	<ul style="list-style-type: none"> <li>Clustering arrangements of farmers to allow production sequencing and to increase production;</li> <li>Demand for crops is high in the local market;</li> <li>Working with SAA and to provide farmers with technical and extension support</li> </ul>	<p><b>Strengthening SAA Capacity for :</b></p> <ul style="list-style-type: none"> <li>Supply inputs to farmers;</li> <li>Extension support to farmers;</li> </ul> <p><b>Supporting Farmers Associations:</b></p> <ul style="list-style-type: none"> <li>SeyFA (if concluded viable);</li> <li>Five Clusters of farmers identified to organize production;</li> </ul>
ii) <b>Post-Harvest:</b> (Constraints, opportunities and solutions)	<ul style="list-style-type: none"> <li>Little post-harvest activities;</li> <li>Little knowledge on post-harvest handling of crop</li> </ul>	<ul style="list-style-type: none"> <li>Training of farmers on grading, sorting, packaging, chilling of crop;</li> <li>Training on crop preservation techniques;</li> <li>Training on drying of crops</li> </ul>	<p><b>Supporting SIAH/SENPA:</b></p> <ul style="list-style-type: none"> <li>To offer Business Management and Entrepreneurship Skills</li> </ul>

<b>iii) Marketing:</b> (Constraints, opportunities and solutions)	<ul style="list-style-type: none"> <li>No contracts with customers;</li> <li>Sales mainly at farm gate and by the road side;</li> <li>No value addition of crop</li> </ul>	<ul style="list-style-type: none"> <li>Potential for contractual arrangements with buyers as a result of clustering which provides production assurance;</li> <li>Branding and packaging to provide marketing edge</li> </ul>	<p>training to Farmers;</p> <ul style="list-style-type: none"> <li>Value addition; Post Harvest training</li> </ul> <p><b>Focused Supply and Demand Studies:</b></p> <ul style="list-style-type: none"> <li>To establish potential for Farmer Clusters to deliver to local markets</li> </ul>
<b>b) Fish Value Chain</b>	<b>Current Constraints</b>	<b>Current Opportunities</b>	<b>Proposed Strategies</b>
<b>i) Production:</b> (Constraints, opportunities and solutions)	<ul style="list-style-type: none"> <li>Shortage of critical fishing tools including ice, hooks baits and netting equipment;</li> <li>Poor state of boats;</li> <li>Limited technical support;</li> </ul>	<ul style="list-style-type: none"> <li>Support to FBOA for supply of fishing tools;</li> <li>Partnership with SMA for training fishers of boat service and maintenance and safety at sea</li> </ul>	<p>-Partnership and Support to Fish Boat Owners Association</p> <p>-Market Linkage with ISPC</p> <p>-Partnership with SMA</p>
<b>ii) Post Harvest:</b> (Constraints, opportunities and solutions)	<ul style="list-style-type: none"> <li>Lack of storage facilities;</li> <li>No knowledge on post-harvest handling of fish;</li> <li>Lack of fishermen certification;</li> </ul>	<ul style="list-style-type: none"> <li>Fishers training and certification to join FBOA;</li> <li>Post-Harvest training at SMA</li> </ul>	
<b>iii) Marketing:</b> (Constraints, opportunities and solutions)	<ul style="list-style-type: none"> <li>No contracts with fish customers;</li> <li>Limited initiatives towards developing value addition of fish by artisanal fishers.</li> </ul>	<ul style="list-style-type: none"> <li>Potential for contractual arrangements with buyers such as ISPC;</li> <li>Strengthening of the Fish Boat Owners Association;</li> <li>Partnership with FBOA on the on-going banding initiative</li> </ul>	



## **5.2: Note on Capacity of Farmers Organization**

This note briefly reviews the capacity of three active farmers' organizations in Seychelles: SEyFA; Praslin Fishers Association and FBOA.

### **1) Seychelles Farmers Association (SEyFA)**

This association was established as a farmers lobbying organization to support farmers to increase livestock and crop productivity. SEyFA was established to cater for needs of farmers to access markets following liberalization of livestock imports in 2010. The association has 110 members with four units: Praslin (1); Mahe (4) and has been working with SAA to assist farmers in Praslin and Mahe. The organization has developed a strategic framework and business plan for 2010-2017.

The Association is a member of the Southern African Confederation of Agricultural Unions (SACAU) which aim is to promote the creation of an enabling environment that allows southern African farmers to realise their productive potential by influencing regional, continental and global policies and programmes related to agriculture.

However there is no information about the activities so far carried out and the services provided to farmers. The organization seeks to work with CLISSA for marketing support, inputs support, lobbying and advocacy and implementation of its strategic plan and AWPB for 2016.

Before engaging into this partnership, it is advised that CLISSA carry out a diagnostic of this organization and on the basis of the result obtained, define the priority action to carry out.

### **2) Praslin Fishers Association**

This is mainly an artisanal fishers association with about 25 members engaged in fishing activities in Praslin. The organization has no established structures but is led by an active Chairman Mr. Darell Green.

Key challenges are: lack of clear organization structures with a Chairman who seemingly does everything for the organization. Group cohesion is also challenging since most farmers' find it difficult working together as a cooperative for fear of being deceived.

The Associations requires support for setting up a cold storage facility in Praslin due to the challenges currently faced in storage of bait for fish in sufficient quantities for effective carrying out of fishing trade. Members met during the mission indicated that the estimated cost of storage facility is SCR 85,000-100,000 and members of the association have undertaken to meet costs of running the storage facility. Other support required includes: boat repair facility; ice machine; training on fish post-harvest and boat repair; jetty for unloading fish and shop for selling fish.

However partnership with CLISSA will need to ensure that members are fully involved in the management of the organization and any investment made should be managed as a public/collective good.

### **3) Fish Boat Owners Association (FBOA)**

This association has about 15 members and has been supporting fishers to sell their fish to ISPC, hotels and restaurants.

FBOA is engaged in a certification process for its members which entail training of fishers on fishing, post-harvest handling of fish. The association provides hook and line training, small gears for fishers at reasonable price, sale of bait and hooks, storage facilities, supply of ice and fish processing.

FBOA seeks support from CLISSA on institutional capacity building, storage capacities, marketing support and capacity building of fishers.

4) **Other Farmers and Fishers organizations-** La Digue; Praslin and Mahe.

These are mainly loosely organized, lacking in structure and organized around specific crops. Many farmers want to work on their own rather than joining or working with farmers' organizations. Many organizations lack leadership and institutional structures and capacity making them unattractive to farmers, benefits of collective engagement are not clear to farmers and ownership of resource garnered from clustering are not clear. Due to lack of clear ownership rights and lack of leadership, collective arrangements collapse or disintegrate where there are disagreements.

### **5.3: Draft Terms of Reference for the Technical and Organizational Audit of Farmers Organizations**

#### **Main objective**

The main objective of this task will be to carry out an organizational and strategic audit of five selected Farmers organizations in Seychelles: (i) *Seychelles Farmers Association*; (ii) *Praslin Farmers Association*; (iii) *La Dique Farmers Association*; (iv) *Praslin Fishers Association*; and (v) *Fishermen and Boat Owners Association*. The audit will shed light on the farmers' organizations, how they operate; who are their members, what are their constraints and results. This audit should make it possible to develop a strategy to strengthen the organizations that will be considered viable to partner with CLISSA in order to better serve their members.

#### **Specific Objectives of the audit**

On the basis of the overall goal of the audit, the following will be the specific objectives:

- To describe precisely the organizational and legal structures of the farmers' organizations;
- Analyze the financial management and resource mobilizations structures of the associations;
- Analyse the leadership and management systems of the organizations;
- Analyse the channels for transmitting information and administrative, financial and accounting documents;
- Analyse the activities, results and challenges faced by these organizations and define with the members a strategic plan for the next 2-3 year.

#### **Scope of Activities to be undertaken:**

The following activities will be undertaken:

##### Assessment of Organizational Governance

The assessment of organizational governance will seek to provide clarity of the organization's motivation, purpose, and stability by reviewing its guiding principles, structure, and oversight mechanisms:

- Does the organization have a vision statement, mission statement, and statement of values?
- Are the vision and mission used to set priorities? If so, please describe how;
- Does the organization regularly review the vision and mission statements (for example, in conjunction with strategic and/or operational planning)?

##### Assessment Legal Status

The rationale for this assessment will be to ascertain legal registration, according to the laws of the country, as well as careful adherence to statutory requirements to enable an organization to gain recognition, perform functions like holding a bank account, and implement programs accountably. Is the organization legally registered and is the documentation of current legal registration readily available:

- Does the organization comply with the tax codes for both itself and the staff if applicable?
- Does the organization comply with annual statutory requirements, such as audits and other reporting?

##### Assessment of Leadership and Organizational Plan

The objective of this section is to assess the organization's capacity to develop and use key policies, procedures and systems to manage its general operations and functions.

- Who are the members of the organisation and how to they participate in the activities and decision making?

- What is the leadership structure of the organization?
- Is the organizational and reporting structure clearly documented and disseminated?
- Is there an organogram or other document outlining supervisory and staff responsibilities?
- Does the current structure adequately support the departments/functions?
- Are there written organization policies and procedures that support operational needs?
- Are they presented so financial and non-financial staff can benefit from the guidance?

#### Assessment of Financial Management

The objective of this section is to assess the quality of the organization's financial system and policies and procedures and the staff's knowledge of the system.

- What type of accounting system does the organization use?
- How is the system implemented?
- Is the organization using accounting software?
- Which financial procedures are documented? How are financial procedures developed and approved? How often are the financial procedures formally reviewed/updated?
- What is included in the financial policies and procedures?

#### Assessment of Resource Mobilization

The rationale of this assessment will be to check if the resource mobilization plan ties to the strategic plan's budget and enables the organization to prioritize strategies for identifying and approaching appropriate donors

#### Assessment of activities and results

This section will mainly focus on the activities so far carried out and the services provided to members. This will lead to the analysis of the strength and weaknesses of the organisation. This section will also provide answers to the following questions:

- Does the organization have a strategic plan that identifies resource needs?
- Have potential funders or donors been identified?
- Is there a strategy for obtaining funds and resources to support program priorities?
- Do staff or board members in the organization have the skills needed for proposal writing and communication strategy implementation?
- Does the organization have income-generating activities or other sources of funds that are not tied to a single program but can support general operations?
- Does the organization partner with other organizations to maximize input and minimize cost?

#### Stakeholder Involvement

The rationale for this assessment will be to identifying and nurture relationships with relevant stakeholders can facilitate program coordination, partnering, and resource sharing. Discuss some or all of the following questions:

- Does the organization have a clear definition of stakeholders?
- Does the organization have complete and up-to-date information about all stakeholders working in the same geographic and/or technical areas?
- Does the organization have collaborative agreements with relevant stakeholders?
- Does the organization know stakeholder's approaches for addressing gender and culture issues?
- Does the organization plan with and update relevant stakeholders (community, donors, districts, etc.) on progress?

#### **Duration of Assignment**

The Assignment is expected to last 45 days.

### **Consultant Qualification**

The ideal Consultant will possess Master level qualifications in social sciences (agriculture, agronomy or agri-business, anthropology etc) with a good experience on farmer's organization.

Extensive experience in conducting farmers organization studies and capacity strengthening as well as strong analytical, research and report writing skills are required;

### **Reports**

The consultant will submit the following reports:

- An Inception report prior to commencement of the study and one weeks after contract signing that provides details regarding the methodology and work plan for the assignment;
- A preliminary report to be submitted one month after acceptance of the inception report;
- A draft final report to be submitted to stakeholders for discussion;
- Final report in both hard copy and soft incorporating stakeholders' feedback and comments.

## **5.4: Draft Terms of Reference for Consultancy on Supply and Demand Opportunities for Selected Farmer Clusters in Seychelles**

### **1) Objective of the Consultancy**

The organization of farmers in clusters has been identified as one key strategy to encourage Seychellois farmers to take advantage of market opportunities in the agriculture and fisheries sectors. The potential for contractual arrangements with buyers is available as a result of farmer clustering which provides production assurance to buyers.

This consultancy is proposed to study and review the current supply and demand for selected farmer clusters in vegetable production; fruits; livestock (piggery and chicken); and fisheries. The overall objective of this assignment is to carry out an analysis of demand and supply of vegetables; fruits; livestock and fisheries for selected farmer clusters in the three Seychelles Islands of Mahe, Praslin and La Digue.

In particular, the analysis will shed light on the status and viability of existing and potential markets for the targeted crops and determine the new markets opportunities. The survey will incorporate how selected farmer clusters can be supported, built capacity in order to benefit from the market identified markets.

### **2) Scope of Work**

The scope of work required for this consultancy shall include the following key deliverables by the consultant:

- i) Conduct an assessment of the current demand and supply of the selected vegetable production; fruits; livestock (piggery and chicken); and fisheries by selected farmer clusters in Mahe, Praslin and La Digue;
- i) Asses the technical and organizational capacity of the selected farmer clusters to meet the demand (in quality, quantity and regularity);
- ii) Conduct a value chain mapping of stakeholders in the selected crop, livestock and fish value chains and accompany this with a description of the relationships and participation of each stakeholder;
- iii) Identify possible interventions that can be done to improve supply by the farmer clusters;
- iv) Conduct an analysis of potential risks that may hamper reaching goals of the selected value chains as well as risks that may hamper commercialization of the value chains;
- v) Provide recommendations and description of the key systemic / critical issues, as well as practical actions to address the issues, recommendations for upgrading supply by farmer clusters to meet anticipated demand;

### **3) Duration of Assignment**

The Assignment is expected to last one month.

### **4) Consultant Qualification**

The ideal Consultant will possess Master level qualifications in agriculture, agronomy or agri-business. Extensive experience in conducting of value chain studies and market assessment studies, strong analytical, research and report writing skills.

## **5) Reports**

The consultant will submit the following reports:

- i) An Inception report prior to commencement of the study and 3 days after contract signing that provides details regarding the methodology and work plan for the assignment;
- ii) A preliminary report to be submitted 3 weeks after acceptance of the inception report;
- iii) A draft final report to be submitted to stakeholders for discussion;
- iv) Final report in both hard copy and soft incorporating stakeholders' feedback and comments.

## **Appendix 4: Technical note for Component 2: Improving Access to Agricultural and Rural Finance**

### **6.1: Note on Detailed assessment of Component 2: Improving Access to Agricultural and Rural Finance**

1. The objective of this component was to provide the financial services required for transforming the ailing agricultural sector and removing access constraints for smaller farmers, producers, fishers and rural micro entrepreneurs to financial services.
2. The activities were structured around two subcomponents:
  - Sub-component 2.1 – refinancing fund. This introduces a USD 1 million line of credit to provide refinancing to agricultural, fisheries and rural micro enterprise. This sub-component was to be implemented with two banks (DBS and SCU) with a strategic view on agricultural revival and generating adequate experience in rural development financing.
  - Sub-component 2.2 – complementary support to participating banks. Through activities under this subcomponent, the necessary training and management development support will be provided in order to make the agricultural revival a viable proposition for banks in the Seychelles.
3. The cumulative level of disbursements for this component as of December 31st, 2015 stands at a very low 3% (respectively 0% for sub component 2.1 and 60% for sub component 2.2). It was decided in November 2015 to cancel the Line of credit (LoC) / Refinancing fund (USD 1,078 million) at the request of the MFA, which explains this low level of disbursement. Expenses made were only under Sub component 2.2 for various consultancies for a total amount of USD 36 000<sup>7</sup>. These studies were carried out as preparatory activities for implementation of the LoC, and activities planned have indeed not been implemented (training of loan officers and support for transformation of DBS).

#### **Background for the cancellation of the Line of Credit/Refinancing mechanism**

4. In order to facilitate the implementation of the Component, the initial financing agreement was revised to allow the Development Bank of Seychelles (DBS) and the Seychelles Credit Union (SCU) to be the main implementing partners of CLISSA's USD 1 million agricultural credit facility. The GoS in collaboration with IFAD commissioned a reshaping study in October 2014 for this component in order to align its implementation modalities to the prevailing market conditions.
5. The April – May 2015 supervision mission noted that that some of the proposals were not aligned to IFAD best practices, notably:
  - The use of grants to finance revolving credit funds with no modality for repayment of the funds;
  - The DBS average interest rate is around 10%, while the proposed rate for CLISSA funds was set at 6%. This interest rate for CLISSA funds was however higher than the other funds under DBS management which are between 2.5% and 5%. For example, the DBS indicated that their FDF<sup>8</sup>, ADF<sup>9</sup>, SME funding schemes prices at 3%, 2.5% and 5% respectively, are available to farmers and fishers. With the significant difference in the interest rates for CLISSA credit facility and the various funding schemes put in place by GoS in partnership with commercial financial institutions, the question then arises whether there will be many clients for the CLISSA credit facility within the CLISSA implementation period ending in Dec. 2018

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<sup>7</sup> Reshaping study for the LoC, Credit demand survey for small scale farmers and artisanal fishers, and Due diligence of DBS and SCU, identified institutions for the LoC.

<sup>8</sup> Fishery Development Fund.

<sup>9</sup> Agricultural Development Fund.



- DBS indicated that they would manage CLISSA funds off their balance sheet, thereby taking no risk if there were to be defaults in repayments;
- A credit demand survey was not carried out to identify the current use of financial services among the target group and evaluate the demand (financing objectives, amounts, periods).

6. Based on the above, the April - May 2015 supervision mission recommended that: (i) the LoC be structured as loan funds rather than a grant; (ii) commercial interest rates be applied instead of subsidized rates (iii) the management of the LoC be done in the main balance sheet of participating financial institutions rather than off balance sheet to evaluate fully the financial situation and the impact of the fund on the bank's portfolio and, (iv) the PMU carry out the credit demand survey for the use of the LoC.

7. Discussion engaged by the Ministry of Fisheries and Agriculture (MFA) with DBS concluded that DBS is hesitant to put the funds for this facility on its books as they already have a tight limit on the loans they can generate. If they are to take this facility as a loan, they would limit the other possibly more lucrative loan facilities they could manage. Furthermore, the beneficiaries already have access to financing schemes offering better terms than this facility would be offering. In this context, the MFA requested IFAD to examine the possibility of reallocating the existing fund earmarked for the Agricultural credit scheme to the other two technical component, mainly to finance the rehabilitation of other public goods for the smallholders such as irrigation schemes, water catchment, access roads and other village level infrastructure to enhance agricultural production.

8. As a follow up on the request by MFA for the reallocation of the Sub component 1 resources, an IFAD mission took place from 23 to 28 November 2015, which objectives were to (i) discuss with the Government authorities and partners involved, the major issues affecting the implementation of the CLISSA credit facility scheme and assess the possible risk of the GoS's proposal on CLISSA overall goal and objectives, (ii) provide guidance and make recommendations on the way forward for IFAD consideration.

9. The follow up mission conducted an analysis of the supply and demand for finance for small scale farmers, artisanal fishermen and backyard gardeners, and concluded that CLISSA Line of Credit (LoC) is not justified in the current context of Seychelles financial sector.

### **Analysis of the supply and demand for finance for small scale farmers, artisanal fishermen and backyard gardeners**

#### ***Supply of financial services***

10. In terms of supply of financial services for CLISSA targets, the Seychelles financial market is characterized by the existence of several Government subsidized schemes, the major ones being : (i) the Agricultural Development Fund (ADF) targeting agriculture sector including small scale farmers; (ii) the Small and Medium Enterprise (SME) scheme, targeting SMEs in various sectors including agriculture and fisheries, (iii) the Small Business Financing Agency (SBFA) targeting cottage industries and other small businesses, and (iv) the Fishery Development Fund (FDF) - another subsidized fund managed by DBS but targeting mostly semi industrial fisheries not targeted by CLISSA. These schemes have been set up and promoted by the Government to address the reluctance of the banks to finance sectors perceived as risky, including small scale agriculture and artisanal fisheries, and to ensure access to affordable loans with below market interest rates and collateral and equity requirements.

11. **The Agricultural Development Fund (ADF)** is a Government fund set up in 1991 in partnership with the African Development Bank and managed by DBS (Development Bank of Seychelles). It offers mid-term loans up to SCR 1 million with below market interest rates of 2.5% per year. Mid-term loans of more than SCR 1 million are priced at commercial lending rates currently between 10 and 15%. The total loan portfolio is currently SCR 24 million for a total of 196 borrowers (average outstanding loan of SCR 122 000), with a remaining available balance of SCR 1 million. The Government is committed to increase the fund by SCR 10 million, which will bring the total fund to SCR 35 million. This fund is under management by DBS, off its balance sheet, with a fee paid based on repayment rate. It currently suffers from a high level of non-performing loans (NPLs) dating back several years, with 41% of the borrowers being in arrears. Recent changes in the modalities of the management of

the fund (including loan approval by the Bank) and recovery efforts under way are expected to improve the performance of the fund.

12. **The Small and Medium Enterprise (SME)** scheme is a Government promoted partial guarantee scheme set up in July 2013 to boost banks' lending to SME sector. Eligible applicants are start-ups SMEs with turn over below SCR 5 million, in all economic sectors excluding retail and wholesale. Loan amounts are up to SCR 3 million, with interest rate of 5% for the first SCR 1 million and 7% for the next SCR 2 million, and terms of 5 to 7 years. Interest is subsidized for the difference between the interest paid by the client and the average Prime Lending Rates of commercial banks as published by the Central Bank. Mandatory borrower contribution is reduced to 2.5% and guarantee requirement by Bank should not exceed 100% of the loan amount. The partial guarantee scheme funded by the Government covers between 50 and 70% of the written off loans as a last resort depending on the loan duration. Contrary to ADF, these loans are financed by Banks with their own resources and are on their balance sheets, which should ensure a better management and repayment rate.

13. Detailed characteristics of the SME scheme are summarized below:

Eligibility	New business loan applications for business with turn over < SCR 5 million Business activity defined as all activities excluding retail and wholesale businesses. Applicant to submit business plan which meets the general viability criteria of the Bank. Furthermore, applicants have to meet any criteria as per the Bank guidelines, including having a good credit status.
Loan amount	Up to SCR 3 million (refinancing of loan excluded)
Interest rate	5% on the first SCR 1 million 7% on the next SCR 2 million
Interest rate subsidy	Difference between the interest paid by the client (on the first SCR 3 million) and the average Prime Lending Rates of commercial bank for the previous month as published by the Central Bank of Seychelles.
Repayment period	5 to 7 years
Grace period	Up to 6 months. Payment of interest during grace period or capitalization of interest
Bank charges	Total fees / Charges < 0.25% of the loan amount. Penalty however applicable.
Mandatory Personal contribution	Max 2.5%
Guarantee	Guarantee requirement by bank max 100% of loan amount Government guarantee through budgetary allocation: 0-5 years: 50% 6 years: 60% 7 years and above: 70% Cover loans written off as a matter of last resort

14. Seven Government and Commercial banks are participating in the SME scheme<sup>10</sup>. As of October 2015, a total of 487 loans have been disbursed for a total amount of SR 430 million. Out of this total, only 7 loans were for agriculture, for a total amount of SR 4.68 million (1.1% of the total disbursements compared to a 1.9% share of the GDP) and 40 loans for fisheries for a total amount of SR 27.8 million (6.5% of the total disbursements compared to 8.9% share of the GDP). Portfolio at risk is reported to be less than 4% by DBS, which accounts for 72% of the portfolio. The follow up mission was moreover informed that a new scheme called "SME Plus" has been recently launched to enlarge the scope of the current SME scheme, with more focus being put on some risky sectors including fisheries and agriculture.

<sup>10</sup> DBS, MCB (Mauritius Commercial Bank), Nouvobanq, Barclays bank, SCB (Seychelles Commercial Bank), Baroda, SCU (Seychelles Credit Union).

15. Status of the SME scheme as of October 2015 is summarized below:

**Table 1: Status of SME scheme as of October 2015 (since inception of the scheme in July 2013)  
- Loan approval by Banks**

<b>Banks</b>	<b>Number of approved loans</b>	<b>Number of rejected applications</b>	<b>Total value of approved loans (SCR)</b>	<b>Average value of approved loans (SCR)</b>	<b>Share of the total loan value</b>
Development Bank of Seychelles	349	85	309,049,401	886 000	72%
Mauritius Commercial Bank	72	23	45,686,637	635 000	10.5%
Nouvobanq	27	7	33,425,910	1 238 000	8%
Barclays Bank	21	7	31,013,593	1 477 000	7%
Seychelles Commercial Bank	8	16	4,113,000	514 000	1%
Baroda Bank	4	0	3,200,000	800 000	0.75%
Seychelles Credit Union	6	0	3,600,000	600 000	0.75%
<b>Total</b>	<b>487</b>	<b>138</b>	<b>430,088,541</b>	<b>883 000</b>	<b>100%</b>

**Table 2: Status of SME scheme as of October 2015 (since inception of the scheme in July 2013)  
- Loan approval by Economic sector**

<b>Sector</b>	<b>Number of approved loans</b>	<b>Total value of approved loans (SCR)</b>	<b>Average value of approved loans (SCR)</b>	<b>Share of the total loan value</b>
Construction / Real Estate	122	186,235,895	1 527 000	43.3%
Transportation	158	101,310,428	641 000	23.6%
Tourism	33	45,355,064	1 374 000	10.5%
Services	77	43,905,072	570 000	10.2%
<b>Fisheries</b>	<b>40</b>	<b>27,776,520</b>	<b>694 000</b>	<b>6.5%</b>
Food processing / Manufacturing	10	9,594,275	959 000	2.2%
<b>Agriculture</b>	<b>7</b>	<b>4,680,400</b>	<b>669 000</b>	<b>1.1%</b>
Restaurant and bar	3	4,100,000	1 367 000	1%
Arts and crafts / Entertainment	13	3,977,887	306 000	0.9%
Catering	9	2,516,000	280 000	0.6%
Tailoring	14	487,000	35 000	0.1%
Industrial production	1	150,000	150 000	0.0%
<b>Total</b>	<b>487</b>	<b>430,088,541</b>	<b>883 000</b>	<b>100%</b>

Source: SME scheme status as of October 2015. Central Bank.

16. DBS represents 72% of the total loan disbursements under the SME scheme, with only 2 commercial private banks showing a significant participation (Mauritius Commercial Bank and Barclays Bank).

17. Agriculture accounts for 1.5% of the number of loans disbursed and 1.1% of the amounts (share between small scale farming and bigger commercial farmers not being available), compared to a 1.9% share of the GDP. Out of the 7 banks participating in the scheme, only 2 have so far financed agriculture (DBS and Nouvobanq, both Government owned). Banks indeed view agricultural lending as highly risky, and tend to consider that the small scale farming sector should be financed through the dedicated and highly subsidized Agricultural Development Fund<sup>1112</sup>.

18. Fisheries accounts for 8% of the number of loans disbursed and 6.4% of the amounts (share between artisanal fishers and semi industrial fishers not being available), compared to a 8.9% share of the GDP. Out of the 7 banks participating in the scheme, 4 have so far financed fisheries (DBS, MCB, Nouvobanq and Barclays).

19. The approval rate stands at 78 % of the 625 applications recorded. This on the one hand tends to demonstrate that the Banks are adequately screening the loans, since they take a significant credit risk, but on the other hand this highlights difficulties by the applicants to comply with loan requirements. As mentioned in the report on the scheme provided by the Central Bank, some of the reasons for such rejections could be attributable to factors such as lack of proper business plan, insufficient collateral, project not bankable and risk aversion mainly on the part of the commercial banks amongst others.

20. **Small Business Financing Agency (SBFA)** is targeting small businesses including cottage industry, with maximum loan amount of SCR 25 000 for cottage industry (at 2.5% interest rate) and SCR 300 000 for other small business (at 4% interest rate).

21. The table below summarizes lending conditions:

**Table 3: Lending conditions**

Criteria	Cottage industry	Other small businesses
Objectives	Finance small business activities carried out at home	Projects for start-ups for various activities (20 activities listed, including horticulture, backyard farming and fishing).
Eligibility	Activities carried out at home and fit for a cottage industry certificate	Businesses which are owner operated and employing not more than 10 people
Loan amounts and interest rate	Max SCR 25,000. Interest 2.5%	Max SCR 300,000/ Interest 4%
Repayment period	Up to 3 years	Up to 7 years
Grace period	Up to 6 months	Up to 6 months

<sup>11</sup> This statement was in the November 2015 mission report. It was derived through meetings with various stakeholders.

<sup>12</sup> Analysis is that private banks currently tend to consider that small scale farmers should be financed by ADF under management by DBS, knowing that they are not currently interested to finance this sector because of perceived risk and lack of knowledge of the sector. As mentioned below, the objective of the Project in Seychelles context should be to convince these banks that the sector would be a good business for them, first through the subsidized SME scheme that many of them already have on their balance sheet for non-agricultural activities (the scheme is currently almost not used by the banks for financing agriculture and SME +scheme is expected to focus more on agriculture), noting that ADF size is not sufficient to cover all needs (and with doubts about its sustainability), and that they could design products more attractive for small scale farmers, even if interest rate is higher than under ADF. It is also to be noted that loan amounts and terms under subsidized schemes are capped, and that banks could tap the market for the bigger and longer term loans, including from farmers graduating from the subsidized schemes.

Security	Qualified guarantor. Assignment of insurance policy	Mortgage on land / property. Qualified guarantor. Assignment of insurance policy. Pledge. Treasury bonds.
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22. Apart from these subsidized schemes, all banks are offering business loans on commercial terms with significantly higher interest rates (between 10 to 15%), equity requirements (between 10 and 40%) and collateral requirements than the subsidized schemes.

23. Summary of loan conditions is presented below<sup>13</sup>:

Parameters	Modalities
Interest rates for commercial business loans/overdraft/Letter of credit/Syndicated loans	Between 10 (DBS) and 16% (Nouvobanq)
Processing fees	1% for all banks except 1.5% for SCB
Borrowing limits	No limits reported for individual loans
Repayment period and modalities	<p>All credit institutions surveyed reported a repayment period range of between 6 months to 20 years depending on the type of facility and results of negotiations between the borrower and the lender.</p> <p>Periodical repayment is done by fixed monthly instalments with 100% of respondents having credit facilities stating so. DBS however stated during the mission that quarterly repayments are possible.</p> <p>Grace period ranging between 3 months to 1 year.</p>
Equity requirements	Between 10 and 40%. More than 20% for all banks except DBS and SCU
Other conditions / requirement	<p>A good track record. This encompasses dealings with other banks and the extent of exposure/experience and knowledge of the sector. Financial information with regards to the applicant is sourced from the Credit Information System (CIS) system maintained by the Central Bank whereas exposure information is sourced from the Registration bodies.</p> <p>Strong business plan including projections based on past performance. The financial statements have to be audited.</p> <p>Collateral and/or guarantee. The overall value of the security offered varies and some commercial banks request that it be higher than the borrowed amount taking into account depreciation and legal costs in the event of foreclosure. Ability to cover the amount borrowed is also assessed for the guarantors.</p> <p>Registration with the SAA (Seychelles Agriculture Agency) for agriculture and SFA (Seychelles Fishing Authority) for fisheries is deemed necessary given the banks' limited knowledge of the sectors. The viability of a project is assessed by SAA and approval would be on the basis of the recommendations of the SAA (at least for DBS).</p>

<sup>13</sup> Data extracted from the Credit survey report, for 8 banks: DBS, SCU, MCB, Nouvobanq, Barclays Bank, SCB, Habib Bank, and Bank of Ceylon.

24. It was moreover confirmed during the mission that the overall financial sector is currently overliquid. Both agricultural and fishery sectors remain however perceived as highly risky by the banks, due to some bad past experiences and mostly because of the lack of in-house knowledge of the sectors and lack of adapted specific products and dedicated risk management policies.

#### ***Demand for financial services***

25. In terms of demand from CLISSA target groups (small scale farmers and artisanal fishers), main findings of the Credit demand survey financed by the Project in August – October 2015 are the following:

- Out of the 529 registered small scale farmers, 27% are currently servicing a loan, with average loan amount of SR 918 000 (minimum loan of SCR 25 000, maximum SCR 10 million), to finance operations and expand the business. 71% of the farmers indicated that they intend to borrow in the future.
- Out of the 1,601 registered fishers, 23% are currently servicing a loan, with an average loan amount of SR 636 000 (minimum loan of SCR 60 000, maximum SCR 8 million), to finance operations and expand the business. 53% of the fishers indicated that they intend to borrow in the future.
- Main providers of subsidized credit are all Government-supported banks - DBS (60% of the borrowers), SBFA (30% of the borrowers) and SCB (4% of the borrowers).
- More than 90% of the farmers and fishers stated that an acceptable interest rate should be below 3%. Due to a lack of any profitability analysis being available at the Project level, it is not clear whether the 3% rate is based on the actual capacity to service the loans. It is also not clear to what extent subsidized interest rates under Government schemes are influencing the mentality of interest rate caps by borrowers.

26. Main challenges faced by the farmers and fishers to access finance are (i) difficulty to provide required collaterals, including personal guarantors, (ii) long process between loan application and loan disbursement, and (iii) loan conditions not well adapted to cash flow of the business (too short grace periods and non-cash flow based repayment modalities). It is estimated that one in every six loan applications have been denied in the past, main reason being lack of collateral.

27. Regarding backyard gardeners, estimated to be around 8 000 and who play a significant role in agricultural production for household consumption (especially for fruits, vegetables and herbs), baseline study produced in January 2015 shows that production is mostly for self-consumption, with however 23% of the backyard gardeners having sold produces in the previous 3 months. This activity being on very small scale and not for commercial purposes, it is assumed that financing needs are low and can be provided under ordinary loans provided by financial institutions, including SBFA and SCU.

#### **Conclusion on the relevance of CLISSA line of credit**

28. **CLISSA line of credit is not justified in the current context of Seychelles financial sector.** Line of credit would be justified in a situation where lack of liquidity in the financial sector would negatively affect access to finance by small scale farmers and artisanal fishermen. The finding of the mission is that liquidity is indeed not an issue in the context of Seychelles, in particular since the GoS has set up several subsidized schemes aiming at facilitating access to finance by CLISSA targets. Past evidence is that lack of liquidity has never been the main reason to deny loans to farmers or fishers complying with lending conditions. Although the credit demand survey has not estimated the amount required to cover actual needs for finance of CLISSA targets, it can be reasonably assumed that enough resources are available through ADF and SME schemes to satisfy the demand, not counting possible access through SBFA and ordinary commercial loans. If ADF fund is limited in amount and may not cover the whole small scale farmers' demand, SME scheme has a high potential to fulfil this demand since it is funded by banks financial resources in an overliquid environment.

29. Another factor justifying irrelevance of the line of credit is the fact that farmers and fishers can access loans with well below market interest rates and are very sensitive to higher interest rate levels. IFAD policy being that line of credit should be priced on market or quasi market conditions, it is thus highly likely that the line of credit if implemented would not be used in this environment within the CLISSA implementation period ending in Dec. 2018.

**30. High level of commitment of the Government to sustain subsidized schemes, and promote access to finance for agriculture and fishery sectors.** Government policy to subsidize loans for agriculture and fishers is in place since more than 20 years through ADF and more recently through SME incentive scheme, and Government has recently increased the ADF fund<sup>14</sup> and set up SME Plus scheme. It can therefore be reasonably stated that current environment justifying irrelevance of the line of credit will remain similar in the coming years and until the completion of the Project.

**31. However, there remain several challenges to be addressed to ensure access to finance by target groups, which are** (i) perception by the Banks that the agricultural and fishery sectors are the more risky and their reluctance to venture into these sectors, (ii) high level of collateral requirement and generally non adapted financial products on offer, and (iii) pending questions on the sustainability of the ADF fund despite recent improvements in its management modalities.

### **Main lessons learnt through this process.**

**32.** In the specific context of Seychelles where the Government is politically committed and has the financial capacity to maintain subsidized loan and/or insurance<sup>15</sup> schemes<sup>16</sup> and where the banks do not have appetite as well as specific expertise to deal with an agricultural portfolio, main support from IFAD Project should focus on two things:

- (i) “derisking” the small scale and artisanal fishery sectors and make them credible for the banks. This can be done through actions aiming at increasing and securing production, and securing and increasing revenues through win – win market linkages, as planned under the other two components of CLISSA, and
- (ii) raising the appetite of the Banks to finance agriculture through studies and capacity building of the Banks in terms of developing agricultural financing strategies, products and processes, based on a value chain approach.

The support is expected to contribute in the short term to increase the share of the subsidized schemes going into small scale farming and artisanal fishery sectors, and in the medium term to facilitate access to financing of farmers and fishers on commercial basis by the banks when the subsidized schemes are discontinued.

**33.** Small scale farmers and fishers in Seychelles are already for most of them market-oriented, with an overall good level of education, and already financially included. The concept and methods of financial literacy as applied in continental Africa do not apply in this context, where the needs of the farmers and fishers are mostly to be able to develop bankable professional business plans acceptable by the banks, to maintain reliable records on their business which is one of the requirements of the banks, and to strengthen their knowledge of the financial products on offer to be able to make the right investment choices.

### **Proposed Orientations for the remaining period**

#### Implementation strategy.

**34.** Even though the LoC has been cancelled, working group on agricultural finance should be revived, in line with the capacity building activities to be implemented. Various stakeholders could participate in this group, for example, the Central Bank, MFA, SAA, SFA, Ministry of Finance, banks involved in agricultural financing and representatives of the small scale farmers and fishers, and other private value chain stakeholders. This working group would contribute to monitoring progress of

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<sup>14</sup> Increase of ADF fund was mentioned by MFA during November 2015 mission.

<sup>15</sup> ADFIS (Agricultural Disaster and Fisheries Voluntary Insurance Scheme) is an insurance scheme started in 2014 being implemented by SAA for farmers and SFA for fishers in partnership with SACOS insurance company, with premium subsidized at 50% by the Government. Evaluation of the scheme will be done by the end of 2016 for further improvements.

<sup>16</sup> Commitment to maintain subsidized schemes was mentioned by MFA during November 2015 mission. Assumption on the financial capacity is based on the overall financial capacity of the Government (related to its “Rich country” status).

agricultural finance in the Country, make relevant recommendations for implementation and possible revisions of the regulatory framework.

Key activities per components and Plan for the remaining period.

35. Based on the lessons learnt above and meetings held during the MTR mission with targeted beneficiaries and banks<sup>17</sup>, the MTR recommends the following activities to be implemented for the remaining Project period in terms of capacity building on supply and demand side:

**On the supply side**

- *Study on profitability of the small scale farmers and artisanal fishery sectors*

Since the banks requested during the MTR to have a clear understanding of the sectors and profile of the small scale farmers and artisanal fishers targeted, especially on the profitability and cash flow of their business, it is recommended to complement the baseline studies already implemented with a more detailed and quantified analysis of the profitability and cash flow of the small scale farming and artisanal fishery sectors, by categories of farmers and artisanal fishers, as soon as possible (before May 2016). Main outlines for the ToR of this study are provided in annex.

Study outputs will in particular be used during the capacity building workshop for banks proposed below to provide them with reliable information on the profitability and cash flow of small scale farming and artisanal fishery, help them make informed assessment of the risk involved in financing the targeted sectors and in consequence, and hopefully, raise their appetite for lending to these sectors.

The study outputs should also be used to complement and update existing credit demand survey and provide more reliable data on potential market for financing of the two targeted sectors. This will be a useful information for banks to justify investment in new products, policies and procedures.

- *Workshop for Banks and non-financial stakeholders on agricultural lending*

The Project will contribute to the organization and funding of a workshop to be organized by Central Bank in 2016 to build capacity of the interested banks in agricultural lending (including small scale farming and artisanal fishery lending), with the objective to provide these lending institutions with the skills needed to better understand the agricultural sector and minimize risk in agricultural lending. Training should be delivered by a local or foreign technical service provider to be identified in consultation with the Central Bank, on a cost sharing basis with the banks. If an international consultant is recruited, he should be assisted by a local expert knowledgeable of the Seychelles financial sector and agricultural and fishery sectors. Participants will be banks' senior managers and representatives of Central Bank, Ministry of Finance, MFA, SAA, SFA and representatives of the agribusiness private sector. Main topics to be addressed during the workshop should be (i) understanding of the agricultural and artisanal fishery sectors, including typical farm budgets with specific financial needs and constraints, (ii) development of tailored and cash flow based products, including value chain financing approaches involving contractual linkages between farmers and off takers, which would hopefully result in reduced interest rates, (iii) operational processes to deliver the products and monitor the clients, (iv) profile and training needs of loan officers and other staff, (v) specific risk management policy, and (vi) linkages with insurance schemes promoted by the Government and private sector.

This workshop is expected to raise appetite of at least some of the commercial banks for the targeted sectors (hopefully more than the two banks identified initially for the LoC which will result in a broader impact of the Project on the financial sector). If the banks identify additional needs to enable them to deliver the services, it is assumed that they would do so using their own resources. It could be the case for instance for development of adapted products, policies and procedures, revision of the bank organization, delivery channels, staff training including loan officers training, ... However, although the Project is not supposed to finance these activities, it could assist on demand in identifying the right service providers, local or foreign, and to contribute to design ToR for their services.

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<sup>17</sup> The meeting was organized by the Central Bank and attended by Bank of Baroda, Bank Al Habib Ltd, Habib Bank Ltd, DBS, BMI, Barclays Bank, Nouvobanq, SCB.



Central Bank of Seychelles should take the leading role for organization of this workshop including mobilization of the banks. It is expected that it will itself benefit from the workshop in terms of understanding of targeted sectors and agricultural finance, which could result in adaptation of the regulatory framework if needed.

Participation in the workshop of other stakeholders like MFA, SAA and SFA is expected to result in a better understanding and mutual trust between financial and non-financial actors. Participation of representatives of the private sector (including the ones currently members of CLISSA National Steering Committee) is also deemed key since a value chain financing approach is likely to be promoted and adopted.

#### **On the demand side**

36. Ensure that specific and adapted modules related to (i) bankable business plans/farm budgets, (ii) business records and (iii) understanding of the financial services on offer are inserted in the business development training planned under component 1. Local service providers selected for business development support should be able to insert these modules in their offer. The objectives here are that (i) small scale farmers and artisanal fishers are able to maintain simplified accurate records for their business, to enable them to monitor their business and its profitability, analyse variations and risks over time, and avail this information to relevant stakeholders like SAA and SFA, and banks as part of the due diligence to be carried out as part of loan application appraisal.

37. Activity on the supply side is expected to have a long term effect if actually taken up by the banks and Central Bank, and thus to contribute to sustained financing of the targeted sectors. Regarding activity on the demand side, a mechanism should be designed at SAA and SFA levels to ensure that capacity building proposed is sustained overtime for the new entrants in the sector (in particular youths).

**Implementation plan for the remaining period is specified below:**

Activity	Quarter				
	Q2 2016	Q3 2016	Q4 2016	2017	2018
Study on profitability of small scale farming and artisanal fishery					
Workshop on agriculture finance					
Support to identify service providers and design ToR					

38. The capacity building of small scale farmers and artisanal fishers on record keeping and knowledge of the financial services on offer should be planned under business management training to be provided under component 1.

### Proposition for adjusted Logframe

Outcomes and outputs	Key performance indicators	Means verification of	Assumptions
Outcome: Improved access to financial services	<p>- 5 banks up from the <i>baseline of 0</i><sup>18</sup>. having developed specific and adapted strategies and products for the small scale farmers and artisanal fishers.</p> <p>- 15 % increase in the number of small scale farmers and 12% increase in the number of artisanal fishers having accessed loans from the banks.</p> <p><i>Baseline: 27% of small scale farmers and 23% of artisanal fishermen servicing a loan</i><sup>19</sup>.</p>	<p>Project reports</p> <p>Central bank, Bankers association and Banks reports</p>	<p>Conducive economic and regulatory environment (no change in policies affecting significantly competitiveness and profitability of small scale farming and artisanal fishery)</p> <p>Banks see the agricultural market as a good business opportunity and are willing to innovate in product design and delivery channels.</p>
Outputs			
Output 1: Study on the profitability of small scale farming and artisanal fishery	One Study conducted and presented to financial and non-financial stakeholders	<p>Project report</p> <p>Study report</p> <p>Feedback from banks and other stakeholders</p>	Availability of qualified technical service provider(s)
Output 2: Capacity building of banks and non-financial stakeholders in agricultural financing	Number of banks and non-financial stakeholders participating in the workshop (public and private)	<p>Project reports</p> <p>Central bank, Bankers association, Banks, SAA and SFA reports</p>	<p>Central Bank takes the lead for the organization and follow up of the workshop</p> <p>Availability of banks and other stakeholders' senior managers</p>

NB) Regarding demand side, add in the indicators under business management training for component 1: number of small scale farmers and artisanal fishers with a reliable record keeping system, and with capacity to select financial services adapted to their businesses.

### Issues and Risk for rural finance

Banks, especially private banks, are currently highly reluctant to venture into agriculture financing. Even if their appetite is raised through Project interventions, there is still a risk that they will not be willing or have the capacity to innovate in terms of product design and management, one of the reason being that the market for agricultural finance is relatively small and might not justify high level of investment by the banks. The risk will be mitigated by presenting credible and profitable business plans.

<sup>18</sup> It is understood that no bank has actually designed specific and comprehensive strategies for agriculture financing, although some may have fine-tuned existing product features.

<sup>19</sup> Baseline data from the CLISSA Credit demand survey for smallholder farmers and artisanal fishermen. August – October 2015. It is expected that at the end of the project, a total of 42% (27% + 15%) of small scale farmers and 35% (23% + 12%) of artisanal fishers will be having access to loans (and hopefully other financial services) from the 5 banks.

## **6.2: Outlines for the ToR for the study on Profitability analysis for Small-Scale farmers and Artisanal fishers in the Seychelles**

### **Introduction**

Within the context of re-shaping component 2 of the CLISSA Project, namely **Improving Access to Agricultural and Rural Finance**, a decision has been taken to reallocate the funds to the other two technical components. Among the reasons for the reallocation was the fact that the CLISSA beneficiaries had access to other financing schemes on much softer terms than those being proposed for the CLISSA facility. However, during the IFAD Mid-term Review mission in March 2016, following meetings with stakeholders, it was noted that challenges remained to be addressed to ensure access to finance by target groups. The challenges are mainly (i) the perception by the Banks that the agricultural and fisheries sectors are very risky, and (ii) high level of collateral requirement and generally non-adapted financial products on offer by the banks and (iii) agricultural margins and profitability are low or sometimes negative under some subsidy schemes. While a significant portion of the facility will be reallocated to technical activities, (under the Component 1 and 3), a small portion of the facility funds will be retained under component 2 and used to finance non-lending rural finance activities, including the proposed profitability studies – the subject of this ToR.

### **Objectives and rationale**

In the light of the above, it is recommended to complement baseline studies already carried out for CLISSA with quantitative and detailed analysis of the profitability of small scale farming and artisanal fishery.

Study outputs will in particular be used during the capacity building workshop for Banks to provide them with reliable information on the profitability and cash flow of small scale farming and artisanal fishery, help them make informed assessment of any risk involved in financing the targeted sectors and in consequence, and hopefully, raise their appetite for lending to these sectors.

### **Expected outputs**

For each category of small scale farmers and artisanal fishermen based on a typology to be proposed by the study, provide quantified data on and analysis of the cash flow and profitability of the business. The study should include a sensitivity analysis for the main factors affecting the cash flow and profitability. In order to conduct a genuine cost/benefit analysis, the study should also include a collation of (i) market prices for farm and fish products, (ii) the full unsubsidized cost of producing, processing, transporting and selling the product in the market<sup>20</sup>, and (iii) yield data (depending on type of varieties and catches, agricultural practices, climate and other external factors, post-harvest losses, etc.),

The study should generate a risk assessment and profile for each typology, with a matrix in which each risk is (i) qualified as Low, Medium or High, and (ii) how the risk can be mitigated.

The study should demonstrate the profitability of each typology, by conducting analysis and quantification of actual cost and revenue streams (cash outflows and inflows), profit margins and Internal rate of return per typology cycle.

The study should also provide, for each typology, a projected cash flow analysis for at least 10 years, clearly separating cash flow for the typology and cash flow for other activities and consumption needs. The analysis should determine any financing needs and potential borrowers' capacities to repay loans (i.e., if a typology will be funded through loans).

The study should also collate information on any need for special financial products adapted to the typology and whether such products exist or would need to be designed.

Furthermore, the study should design an excel tool that can be used to run a quick sensitivity analysis anytime during or even after the project implementation period and train the project staff on how to use the tool.

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<sup>20</sup> The market could be an offtaker (trader, supermarket, middleman, hotel) and/or a consumer in local marketplace, etc.

## Scope of work

Steps of the study/assignment will be:

1) Analysis of existing reports, including baseline studies produced by CLISSA, and conduct meetings with relevant stakeholders (amongst which CLISSA, SAA, SFA, ...) to provide inputs for the typology

2) Establish a typology of the small scale farmers and artisanal fishermen, criteria being mostly nature and modalities of implementation of the business and financial needs.

For instance, typologies could include:

- Small scale farmers categorized according to the type of value chain
  - irrigated vegetable production (with or without greenhouse), and the size of their land.
  - non irrigated crop production, hydroponic, ..... ) and the size of their land.
  - Type of hydroponic production system and the size of their land
- Artisanal fishermen categorized according to their rights of ownership, access and usage (the assumption being that only boat owner may need finance as they can use their boats as collateral).
  - Boat owner/fisher/type of fishing
  - Boat leaser/fisher/type of fishing

3) Based on the typology, design the questionnaires and tools to be used at Step 4 and establish a purposeful sampling approach for each category. The sample size should be at least 10% of the total potential beneficiaries, covering the 3 main Islands (Mahé, Praslin and La Digue).

4) Conduct individual in-depth interviews with purposefully sampled small-scale farmers and artisanal fishermen. The output of the interviews will be information and data needed to establish actual and projected cash flows and Benefit/Cost Analysis (10 years projection), as described above in the expected outputs. The sensitivity analysis will include, but not limited to, input and output price variations, and production/productivity variations. The assumptions and rationale for the variations must be clearly stated.

## Time Frame

The study/assignment should be completed within six (6) calendar weeks from the date of award of the contract.

## Experience and Qualification of the consultant/service provider

The consultant/service provider should have the following experience and qualifications:

- Experience in similar assignments.
- Recognized expertise in financial analysis and knowledge of the targeted sectors.
- Well-versed in English and Creole To ensure that information provided is perceived as reliable by the Banks, the study should be carried out by a private local service provider, independent of MFA, SAA and SFA.

## Report format

The Consultant/Service Provider shall document the study findings in a final report which will be submitted in English. The report shall include:

- An Executive summary (not more than 1,500 words)
- A preamble giving principal features of the study, including objectives and plans of work of the assessment
- Details of the study methodology and analysis
- Lessons learned
- Conclusions and Recommendations
- Excel tool for sensitivity analysis

The report should not exceed 50 pages excluding annexes.

## **Appendix 5: Technical Note for Component 3: Strategic capacity strengthening and infrastructure**

### **7.1: Note on technical findings on communal infrastructure**

#### **Introduction**

This Component supports capacity strengthening of relevant governmental institutions as well as investments in small scale public infrastructure. Among the key tasks of the MTR was to evaluate the GoS's request to reallocate additional IFAD loan funds released from Component 2 to investments in rural infrastructure under Component 3.

Besides reviewing the available data at the Project Management Unit (PMU) and Seychelles Agricultural Agency (SAA), field visits and meetings with farmers in the Project area were carried out. The field visits have been undertaken in the three islands of Mahe, Praslin and la Digue. Discussions were undertaken on site with potential beneficiary farmers, PMU staff and SAA officials in order to identify the needs, the issues requiring specific follow up as well as the likelihood of the Component 3 to achieve its objectives and contribute to the overall goal of sustainable pro-poor economic growth, employment and resilience to external shocks and trends.

#### **Objective of CLISSA Component 3**

The objective of this Component is to: i) provide the necessary and complementary public goods that will enable the implementation of Component 1; and ii) prepare the exit strategy of the project in terms of institutional continuity. The strategy is to strengthen public sector institutions and build infrastructure for delivering the required public goods and meet the requirements of promoted agricultural and fishing activities. Sub-Component 3.1 includes strategic capacity strengthening activities where public sector institutions are supported through human resource capacity building, equipment and limited infrastructure development. Sub-Component 3.2 finances public and collective rural infrastructure to facilitate access to inputs (mainly irrigation, farm roads and de-centralized requisite stores) which are related to activities of Component 1.

#### **Implementation Progress**

While the progress recorded by the MTR is uneven across the two Sub-Components, its overall relevance in the Seychelles context remains high. This is clearly reflected in the Seychelles National Agricultural Investment Plan (SNAIP), which allocates some USD 13 million for Human and institutional capacity development (Programme 5) and USD 10 million for sustainable use of agricultural land, prioritizing investments in irrigation and access roads (Programme 1).

**Sub Component 3.1 - Strategic capacity strengthening** is being implemented in line with its objectives but with some delay. Activities which have been completed or are at an advanced stage of implementation under the Sub-Component are valued at about 36% against a cumulative target of 88% at end PY2 set in the PDR. This appears, however, to be a rather overly optimistic target set at the design stage, which was not adequately supported by a detailed identification of activities to be undertaken during the first years of implementation by the concerned Implementing Agencies (IAs).

The main achievements under this sub-component are related to the upgrading of facilities and provision of equipment for Public Institutions including: i) the MNRI Communication unit; ii) the Seychelles Institute of Agriculture and Horticulture (SIAH); iii) the Seychelles Maritime Academy (SMA); iv) the Anse Boileau Research Station; and v) the Livestock unit of the SAA. The ongoing training activities (on hydroponics and fertigation) involve a total of 10 SAA staff only; however, the SAA is finalizing a proposal for comprehensive overseas training programme (in the region) for additional 14 SAA staff.

In addition, the PMU has engaged with the Fishing Boat Owners Association (FBOA) by carrying out a preliminary consultation and needs assessment for possible support measures. This is noted as an area of future potential intervention under the Sub Component 3.1 that was not included in the original design but is

well in line with its objective of improving the performance of key Service Providers and with the GoS policy to strengthen the roles of such voluntary associations which is reflected in the SNAIP.

The mission supported the detailed planning of future activities under Sub component 3.1 to ensure alignment with the priorities identified in the SNAIP and responsiveness to the demand of the targeted institutions.

**Sub Component 3.2. - Public and collective infrastructure.** CLISSA's infrastructure investments planned in 2015 have been implemented substantially in line with the AWPB. The overall scope of the works implemented includes rehabilitation of 3 de-centralized requisite stores (in Mahe and Praslin) and upgrading of 3 irrigation schemes in Mahe. In addition, CLISSA-supported construction works started in 2015 are still ongoing at a road site in Mahe (Helvetia) and are about to start (pending signing of the civil works contract) at an additional irrigation scheme in Praslin (Cap Samy). The aggregate amount of these contracts (including design and supervision) is about USD 300,000, of which about USD 270,000 of IFAD Loan funds. This is USD 170,000 in excess of Loan funds allocated to Sub-Component 3.2 in the original Financing Plan. While there are no set physical targets for this sub-component in the PDR, its scope was clearly underestimated at the design stage as the demand for public investments in roads and irrigation infrastructure in particular remains high among farmers engaged in CLISSA's activities as well as by the SAA. To this effect, there is a clear scope for the reallocation of IFAD loan funds to sub-component 3.2 in order to: i) offset the current shortfall of funding and; ii) scale up project interventions based on lessons learned and best practices.

The MTR mission visited 3 sites where CLISSA has invested in the development of road and irrigation facilities<sup>21</sup>.

Overall while noting that the quality of the completed works is acceptable, the MTR mission emphasises the need to enhance the prioritization of infrastructure investments based on effectiveness and efficiency criteria. This may be achieved through: i) fostering synergies among the CLISSA Components (namely Value Chain development, farmers' trainings and identified market opportunities under Component 1); and ii) basic cost-benefit considerations to guide the selection of the areas of CLISSA intervention. The limited availability of contiguous farmland makes in fact investments in communal facilities relatively expensive due to the low number of farmers having direct access to any identified communal facility (be it road or irrigation). Moreover, the MTR mission notes the opportunity to introduce good engineering practices in the design of new facilities.

### **Status of outcomes**

Most of the activities realized under the Component 3 have been completed during the second half of 2015 or at the beginning of 2016, while their impact is most likely to be captured at least a full year after completion. To this effect, the MTR mission assessment on the benefits generated is based on qualitative information collected by interviewing the beneficiaries met during the field visits and discussions with various project stakeholders.

Overall, the institutions in receipt of training and equipment reported their satisfactions with both activities financed under CLISSA. One additional positive outcome which is worth reporting is the use of the Equipment provided to SIAH (fridge, chiller, washing facility, scales, crates) not only for demonstration, but also for on demand use by interested farmers. However, the MTR mission emphasises the need to establish an effective monitoring system in partnership with the institutions receiving CLISSA support (e.g. people trained in the upgraded facilities, use of equipment and uptake of good practices from the pilots by the farming community).

As for the completed investments in irrigation, the mission Engineer notes that the project so far has supported the repairs or upgrades of existing hydraulic structures, and that the design documentation does not include a layout and profile of the pipelines nor the key data on the "distribution" side (i.e. number of beneficiaries, farm areas and cropping patterns). This information is only partly available at the SAA GIS unit, but not yet entered into the CLISSA M&E database for future comparison of the "before" and "after project" situation in the farm areas served by the irrigation schemes. Moreover, the mission Engineer notes that the physical upgrades of small storage structures (e.g. roofing of the existing storage tank at La Gogue

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<sup>21</sup> Helvetia (road-ongoing construction); LaGogue (irrigation-completed); Cap Samy (irrigation-intake works and design of storage tank completed)

or construction of a concrete in line storage tank at Cap Sami-Praslin) would have limited impact on the supply of irrigation water during the dry spells. To this effect, it is highly recommended that new investments in irrigation be identified through a comprehensive design of the scheme, including quantitative assessments of the supply and of the demand, the latter based on Crop Water Requirements (CWRs). This would also serve as a comprehensive baseline for the subsequent quantification of intended benefits in terms of increased farmers' incomes.

The current land tenure systems whereby the largest share of agricultural land is state owned and leased for progressively longer periods (most recently from 20 up to 60 years) at a nearly nominal fee of 30SR cents/year/m<sup>2</sup>, is geared to trigger private investments for on farm development; all applicants for new lease or renewal are required to show performance in production and evidence of investment. During the field visits both at an irrigation and at a road construction site it was observed that the investment on common infrastructure has been clearly instrumental in mobilizing private resources (e.g. for the installation of new greenhouses, drip irrigation or land levelling). The effectiveness of infrastructure investments in terms of fostering private investments is to be considered in the evaluation of alternative investment options and is yet to be systematically captured as part of CLISSA's M&E system.



**Figure 1 - Completed pump house (left) and new plastic tunnel and land levelling (right) at La Gogue**

As for the only access road project selected so far for implementation, where construction works are still ongoing, the mission Engineer noted and commends the effective mobilization of additional parallel financing from the Ministry of Transport in the amount of SR 1 million to pave the 700m of CLISSA-financed access road with asphalt. This road section ensures not only access to newly allocated agricultural lands reportedly leased by highly motivated farmers, but also to forest areas, with obvious side benefits in terms of agro forestry activities and containment of wildfires. The multiple uses of the road, in conjunction with the challenging geological and topographic features of the site, caused the selection of relatively high standards (curve width, density of pass points and width of main concrete structures) which, in turn, resulted in a relatively high cost per unit length of access roads (about USD 75,000/km excluding the asphalt pavement).

The key physical features of CLISSA's completed and on-going investments in communal irrigation and roads are reported in the following table.



**Table 1 – CLISSA Investment (completed/ongoing)**

Description	Status	Total Farm area (ha)	Number of farmers (#)
Rehabilitation barrages, reservoirs and distribution pipeline and irrigation network at Port Glaud	Completed	3.0	4
Rehabilitation barrages, reservoirs and distribution pipeline and irrigation network at La Gogue	Completed	7.0	6
Barrage & installation of distribution pipes at Barbarons	Completed	1.4	2
Rehabilitation Helvetia Road	Ongoing	9.6	8
Construction of Storage Tank at Cap Samy Praslin	Ongoing	4.8	10

The rehabilitation of 3 de-centralized requisite stores supported by the CLISSA is reportedly already ensuring a more timely supply of agricultural inputs in the farming areas of Grand Anse-Amitie (Pralin), Valle D'Andor and Union Vale (Mahe), with approximately 180 registered farmers over about 130 ha. However, sales records to support such positive assessment have not been analysed yet.

#### **Proposed strategy for the remaining period**

The post MTR implementation strategy for Component 3 will be to seek clustering of investments around areas with the highest concentration of farmers and contiguous farm areas with a good potential for the uptake and replication of improved farming practices and technologies.

**Table 2 – Total farm area and number of farmers by District**

District	Total Farm area (ha)	Number of farmers (#)
<i>Anse Boileau</i>	94	109
Anse Etoile	16.5	22
Anse Royale	32	9
Au Cap	31.4	11
<i>Baie Lazare</i>	78.4	94
Baie St Anne	22	21
Beau Vallon	6.05	10
Bel Air	2.7	2
Bel Ombre	0.9	1
Cascade	1.8	3
Glacis	1	2
Grande Anse Mahe	35.5	37
<i>Grande Anse Praslin</i>	47	76
La Digue	1.7	6
Les Mamelles	1.8	1
Port Glaud	25	39
Takamaka	12.4	3
<b>Total</b>	<b>410</b>	<b>446</b>

This will to some extent also refer to activities on institutional strengthening under Component 3.1 with targeted support e.g. for the Anse Boileau Research station to further develop as a driver to the introduction of relevant innovations in the adjacent farm areas and to the provision of agricultural equipment to set up a



machine rental service at Grande Anse (Mahe) with a potentially wide service area extending across 5 districts. In addition, for the remaining period the Project would extend its support for institutional capacity strengthening to cover also existing farmers/fishermen organizations which would effectively complement the strengthening of governmental institutions foreseen in the original project design.

### **Post MTR activity plan**

For Component 3, the MTR mission has elaborated with the PMU and with the implementing agencies an activity plan up to project completion under both Sub-Components, considering a revised budget envelope with about USD 35,000 additional IFAD Loan Funds for Sub-Component 3.1 and up to USD 826,000 of additional IFAD Loan Funds to communal infrastructure under Sub-Component 3.2. The plan of activities is built on lessons learned, identified priorities in the SNAIP and it is geared to introduce relevant upgrades in current agricultural practices. Details and costing of each activity are reflected in the revised (post-MTR) project design cost tables.

**Sub Component 3.1** - Besides continuing with the technical trainings and the provision of relevant pieces of equipment (including e.g. cold storage and small equipment for farm mechanization) for trials at SAA's research stations and training institutions (SIAH and SMA), the key areas of future CLISSA's intervention would include: i) a Training Programme undertaken by CIRAD including both SAA staff and progressive farmers in the areas of agronomy, business planning and marketing of agricultural produce ; ii) Capacity strengthening for the newly established Irrigation and Drainage Section of the SAA; iii) GIS equipment with installation of a GIS server, and training at SAA and PMU; iv) Capacity building on irrigation water distribution, conflicts resolution and WUAs for SAA extension staff; vi) Capacity building for Bank managers and officers on agricultural lending (residual activity under the original credit Component of CLISSA).

An additional area of CLISSA's post-MTR strategic capacity strengthening support may include the provision of small equipment for farm mechanization to enable the SAA provide a rental service to interested farmers at the Anse Boileau premises (to be upgraded through Sub Component 3.2). The MTR mission solicited the SAA elaborate a detailed proposal and management plan for the service. In line with the original design of the CLISSA, the project will also support SIAH in developing new curricula to tailor its offer and focus on farmers' and extension agents' needs.

Given the relevance and expected cost of the activities lined up to be carried out under this Sub-Component, the MTR mission envisages the budget envelope of the original detailed financing plan of CLISSA (about USD 500,000 from the IFAD Loan for the Component) be slightly increased with a reallocation of IFAD Loan funds (USD 35,000) from the Component 2. This will allow extending CLISSA support for institutional capacity strengthening to cover also existing farmers/fishermen organizations, complementing the strengthening of governmental institutions foreseen in the original project design. The activities planned include a technical and organizational audit of these organizations as well targeted capacity building for the FBOA to develop as direct providers of services highly sought by the artisanal fishermen. More specifically the project will: (i) hire an international consultant to carry out a technical and organizational audit of the 3 to four main framers associations; (ii) build the FBOA's capacity towards training of fishers towards certification; (iii) provide logistic support to FBOA towards the setting up of a fishing auction centre for artisanal fishers at La Providence; (iv) support to FBOA towards setting up a provision store through an initial stock to generate a revolving fund to obtain small gears; and (v) enhance communication and support the FBOA for fishers participation to fishing trade exposure visits.

The detailed plan of activities elaborated during the MTR will help re-defining the targets of Sub-Component 3.1, included in the revised Logframe. This will be the basis for the setup of an effective monitoring system facilitating reporting both on financial and physical progress. However, monitoring of results will need to be carried out in partnership with the institutions receiving CLISSA support. Overall it is the MTR mission assessment that the project is well positioned for a considerable leap forward in implementation of these activities by end 2016 with a projected disbursement of 62% that would come to 94% at end 2017.

**Sub Component 3.2** The MTR mission visited 4 and 3 potential sites proposed by SAA for up scaling CLISSA's support for irrigation and access roads, respectively<sup>22</sup>. These site assessments as well as the lessons learned from the implementation of completed investments in infrastructure have been the basis to define a pipeline of investments in rural infrastructure which would effectively contribute to CLISSA's

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<sup>22</sup> La Gogue (irrigation-phase 2); Dawn Dew (irrigation); Cacao-Amitie (irrigation); Val D'Andor (irrigation) ; La Gogue (access road); Val D'Andor (road); Zalouzi (road).

strategic objective to promote modern and sustainable agricultural practices and to increase and diversify market access by small holder farmers.

**Irrigation.** The mission Engineer envisages future investments in communal infrastructure (mainly roads and **irrigation** systems) to be concentrated on the three clusters of Grand Anse plain (Praslin); Valle D'Andor and Anse Boileau (Mahe). Based on the MTR mission field visits findings and subsequent technical meetings at the SAA, investments in upgrading the existing irrigation infrastructure in these three areas have the potential to serve up to about 85 ha reaching 140 registered smallholder farmers (1.5 acres/farm in average), i.e. about 30% of the Seychelles' farmers. Improved access to water would allow beneficiary farmers increase cropping intensities (up to 300%) as the risk of reduced water supply during the dry season will be mitigated. The risk of crop losses due to flooding, which is particularly relevant for the pawpaw plantations in the coastal plains of Grand Anse (Praslin) and Anse Boileau (Mahe), will be also mitigated through improved drainage. Based on these assumptions, a simplified model for investments in irrigation schemes, built on the revised crop models, has been elaborated and included in the Financial and Economic Analysis section of this Working Paper.

These investments in communal irrigation infrastructure are also expected to trigger own private investments (e.g. for shade houses, greenhouses and drip lines). Moreover, "progressive" registered farmers in these areas have been already engaged in CLISSA's activities to support marketing and the consolidation of the respective agricultural value chains. This will increase the prospects for the fast uptake of good practices from neighbouring farmers. Other relevant initiatives in these areas that would drive the uptake of modern farming practices and own investments, include the installation of state-of-the-art hydroponic tunnels for year-round vegetables production both in Valle D'Andor (currently under construction in a farm co-owned by the ISPC supermarket chain) and at the Anse Boileau SAA research station (supported by the CLISSA Component 3.1, see above).

The approach recommended by the mission Engineer to be applied to the selected investments in communal irrigation infrastructure is to develop a comprehensive design of the schemes (as opposed to spot upgrades of hydraulic structures). To this effect, the hydraulic calculations will be based on the survey of all the existing lines and on an assessment of the potential of each source feeding the piped system, while the current and projected water demand will be calculated based on Crop Water Requirements<sup>23</sup>. The proposed interventions in these schemes are mainly geared to: i) optimize the use of available water sources (particularly those with year-round reliability); ii) improve the distribution of pressure among the various users connected to the irrigation distribution network; iii) reduce uncontrolled water abstractions from individual sources; iv) and mitigate the risk of crop losses due to flooding/water logging.

The upgrade of intake sites will be designed based on a hydrological assessment of discharge and reliability and would also include the construction of upstream gabion dykes at sites preliminarily identified in a AfDB study<sup>24</sup>. The gabion dykes upstream of the coastal plains will not only stabilize the flow regime and reduce sediment load at the intake sites but will also help reduce the amount of solid material (e.g. earth, sand, gravel, branches and leaves, and solid waste) flowing downstream after heavy rainfall, which would eventually block drainage systems.

In the two gravity fed systems of Grand Anse (Praslin) and Anse Boileau (Mahe), in order to reduce losses and increase the available pressure head at the end users during the periods of peak demand of June-August, the first sections of gravity mains will need upgrading from Ductile Iron pipes on stands to more durable and larger diameter buried Polyethylene pipes. The Val D'Andor irrigation scheme requires the construction of a new rising main, as the current intake will be for exclusive use of the Public Water Utility Company. The pipe sections from the dismantled mains complying with the operational requirements of the distribution systems may be re-used to increase the distribution network inter connections forming ring mains to equalize pressure and access to irrigation across the command area.

Moreover, the irrigation systems will be upgraded with: i) the installation of pre-filtering units (hydro-cyclone sand separators) in main lines; and ii) the installation of water meters on the mains and at farm gate. The installation of water meters will be initially used for monitoring purposes (i.e. will not be directed to change the current irrigation fee structure). However, together with complementary capacity building activities planned under CLISSA's Component 3.1 on irrigation water distribution, conflicts resolution and WUAs, this

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<sup>23</sup> Information of net cropping area and types of crops available from the May 2015 census which is to be imported in the SAA GIS system. The designers will be also required to provide an assessment of farmers' incomes based on crop budgets and detailed cropping patterns at each scheme to benchmark the income level in the "before project" scenario.

<sup>24</sup> Negotiations are ongoing to secure AfDB financing for the Agriculture Sector Development Project (2017-2022) which includes investments in irrigation infrastructure for water conservation

will provide the basic conditions for participatory irrigation water management and increase the likelihood of sustainability of the investments in irrigation.

The issue of drainage in the coastal plains of Grand Anse (Pralin) and Anse Boileau (Mahe) will be addressed by: i) re-checking the invert levels and cross sections through a detailed topographic survey of the existing drains; and ii) reshaping critical sections and piloting the use of check structures to allow for controlled water storage in the drains during the dry season.

The Table below summarizes the scope of works envisaged for the upgrade of each of the three irrigation schemes identified during the MTR mission. It must be emphasised that the items listed are not meant to be prescriptive nor exhaustive, as the exact scope of works will be identified during the detailed design.

**Table 3 -Indicative scope of works in the 3 irrigation schemes targeted**

<p><b>1 Upgrading of irrigation scheme at Grand Anse/Amitie (Pralin)</b></p> <p>1.1 Construction of gabion dyke</p> <p>1.2 Construction of intake structure</p> <p>1.3 Replacement of 400m of 4"DI pipe with 500m 140mm PE</p> <p>1.4 Installation of vortex/filter on 3 gravity mains</p> <p>1.5 Interconnections in distribution network (using 400m DI pipes from the cacao line)</p> <p>1.6 Construction of n.5 check structures on drains</p> <p>1.7 Installation of n.75 water meters @100 each</p> <p>1.8 Installation of n.3 meter on gravity mains @800USD each</p>
<p><b>2 Upgrading of irrigation scheme Val D'andor</b></p> <p>2.1 Construction of intake structure and sump</p> <p>2.2 Installation of submersible pump</p> <p>2.3 Extension of power line 100m</p> <p>2.4 Procurement and installation of 110mm PE rising main</p> <p>Interconnections in distribution network (using 450m PE pipes from the old rising</p> <p>2.5 main)</p> <p>2.6 Installation of n.25 water meters @250 each</p> <p>2.7 Installation of n.1 meter on gravity mains @800USD each</p>
<p><b>3 Upgrading of irrigation scheme Anse Boileau</b></p> <p>3.1 Construction of n.1 gabion dyke</p> <p>3.2 Rehabilitation of n.3 of intake structures</p> <p>3.3 Replacement of 1000m of 4"DI pipe with 1000m 140mm PE</p> <p>3.4 Installation of vortex/filter on 2 gravity mains</p> <p>3.5 Interconnections in distribution network (using 500m DI pipes from the old line)</p> <p>3.6 Installation of n.75 water meters @100 each</p> <p>3.7 Installation of n.2 meters on gravity mains @800USD each</p> <p>3.8 Construction of n.2 check structures on drains</p>

The indicative budget for the full upgrading of the three irrigation schemes identified for CLISSA future interventions is estimated to some USD 350,000 (including VAT).

The design (and supervision) of the upgrading of the irrigation schemes will be contracted out in 2016 as a single package to a professional engineering consulting firm as per applicable procurement procedures and in line with the national public works regulations. Besides the development of hydraulic calculations and work drawings the designers TORs shall mandatorily include (for each scheme): (i) an assessment of the discharge capacity at source; (ii) an assessment of farmers' incomes based on crop budgets and detailed cropping patterns; (iii) an assessment of current and projected Crop Water Requirements; (iv) a geo-referenced survey of the existing and new irrigation lines, drains and hydraulic structures<sup>25</sup>; (v) Technical specifications and minimum machine requirements for construction; (vi) Bills of Quantities and confidential cost estimates. In case of alternative technical options, these would be costed to allow the Project identify

<sup>25</sup> To allow for importing as a new layer the SAA GIS system.

the best option or the part of the works to be implemented with CLISSA financing. The tender for civil works to be included in the implementation pipeline for 2017 will be launched early 2017. This will allow starting the works at the onset of the 2017 construction season.

Access roads. The CLISSA will support future investments in access roads in the same three districts selected for the upgrading of irrigation schemes, primarily targeting the plots at higher elevation that would not benefit from the investment in irrigation. The key criteria to be applied for the identification of the road sections to be rehabilitated will include: i) number of farmers and farming area served; ii) private investment leveraged (e.g. in water tanks or irrigation equipment); and iii) estimated reduction of transport cost considering the aggregate total volume of production. Based on data collected in the field by the MTR mission, monetary savings for benefitting farmers may be significant (up to 50 SR for a 45kg bag to the nearest driveable road) resulting in positive return for such investments, as outlined in the road model included in the Financial and Economic Analysis section of this report.

In light of the limited traffic volumes, the CLISSA will apply minimum standards and a spot improvement approach. This will include the construction of both longitudinal and cross drainage structures and double strip or full concrete paving only in steep slope sections. The typical cross section would have a width of 3.5 m and the longitudinal drain lining (either rectangular or semi-circular) will be cast on site concrete. The use of corrugated HDPE in place of RCC pipes for culverts will be investigated during design. Based on these standards, CLISSA support will be limited to a maximum of USD 40,000/km. In case of a proposed upgrading to higher standards and paving options, the project would work in liaison with the road authority for technical advice and leverage funding. The total allocation made available for the rehabilitation of farm roads under CLISSA after the MTR would not exceed USD 100,000 including VAT. In order to facilitate the implementation of this activity, the design and supervision will be outsourced to a design company, with the SAA rural infrastructure Engineer retaining a Quality Assurance role.

Requisite store. The coverage of the requisite stores initiated prior to the MTR would be completed with the construction of a new unit at Grand Anse (Mahe), which is prioritized in the SNAIP (Sub Programme 5.3) and for which a detailed design has been already prepared by the SAA which sought CLISSA's support for financing its construction. The works involve knocking down the existing structurally deficient concrete columns and raising a new building in the same 300m<sup>2</sup> floor area as well as concrete paving and fencing of the adjacent parking area. The building will include office space and will function as rental/workshop to service agricultural equipment (see XXX above). The existing office premises adjacent to the main store will be converted into a dedicated stock area for chemicals, thus improving the conditions for safe handling and reducing the risk of unwanted contaminations. In light of its strategic location (serving 5 districts) the MTR mission agreed the construction works for the Grande Anse requisite store (valued at about USD 150,000 including VAT) be supported by CLISSA. The summary BOQ of the works including cost estimates is reported in Annex 1 of this WP.

### **Cost estimates for investments in public infrastructure**

The cost estimates for investments in irrigation and road works to be implemented up to project end have been based on the following unit rates collected by the mission Engineer. All costs are inclusive of 15% VAT to be paid by the GoS as contribution to CLISSA. To this effect, the reallocation of about USD 900,000 of IFAD loan funds to infrastructure investments would leverage USD 135,000 of additional GoS contribution as VAT which was not included in the original financing plan of CLISSA.

**Table 4 – Relevant unit rates for construction works**

ITEM	UNIT	Cost (USD)
<i>Polyethylene pipes (PN 6-8)</i>		
DN 110	m	9
DN 140	m	12
DN 200	m	24
<i>Polyethylene pipe installation</i>		
Excavation & Backfill	m	30
Electrofusion welding	m	2
<i>RC Tanks</i>		
100m3	unit	60.000
200m3	unit	96.000
300m3	unit	150.000
<i>RC pipe culverts</i>		
Ø 900mm x 6m	unit	1.800
Ø 450mm x 6m	unit	1.600
<i>Concrete paving</i>		
3.5 m width full concrete 10 cm	m	120
2x75 cm double strip concrete 10 cm	m	60

In line with standard practice in the country, design and supervision of civil works (valued at some 10% of the cost of the works in aggregate) are undertaken by specialized consultants under a single contract for engineering design and supervision services.

#### **Civil works implementation timeline**

The target set for the implementation of civil works under Component 3.2 is to complete all the construction by end 2017. This will allow CLISSA being operational during the defects liability period and for least one year of observations during the life of the project, to extrapolate on relevant medium-term-impacts of investments e.g. on changed cropping patterns and farmers' incomes. The monitoring function of the PMU will be strengthened through capacity building and enhanced coordination with the GIS unit at SAA. The long term sustainability of these interventions will be supported by the programme through dedicated complementary capacity building activities for SAA staff lined up under Sub-Component 3.1.

#### **Sample analysis of investments in infrastructure**

In light of the higher relevance of the investments in communal productive infrastructure in the post-MTR CLISSA as compared to the original design, the mission Engineer developed two simplified models showing the potential returns of the proposed investments in the upgrade of existing irrigation systems and access roads. It shall be noted that only the benefits directly attributable to the development of infrastructure are considered in this model. Additional benefits deriving from the improved marketing arrangements and extension are computed in the financial and economic analysis of activities under Component 1. The key inputs in the infrastructure models are the crop models for vegetables and fruits and the investment model in greenhouse which were based on the agricultural census of 2011 and included in the PDR and the models developed during the MTR. The main inputs from the crop models used for the analysis of the investments in irrigation are reported in bold in the table below:

**Table 5 – Key inputs for the analysis of irrigation investments**

<b>Irrigated Vegetables</b>							
	Farmers	size (m2)	Av size (m2)	Yield (kg/m2)	Farm gate (SR/Kg)	Market (SR/Kg)	Av farm gate (USD)
Beans	101	16.069	159	1,26	60	79,11	925
Capsicum	24	5.028	210	1,53	50	115,83	1.233
Cucumber	162	33.862	209	3,06	20	23,65	984
Chillies	183	69.351	379	1,53	100	200	4.460
Pumpkin	91	127.312	1399	1,34	22	32,34	3.173
Tomato	129	60.558	469	3,38	40	69,01	4.882
Egg plant	79	31.884	404	2,52	19	34,33	1.486
<b>TOTAL</b>	<b>769</b>	<b>344.064</b>	<b>3229</b>				<b>17.143</b>
<b>Av farm mix vegetables REVENUE USD/ha</b>							<b>53.098</b>
<b>Irrigated Fruit tree crops</b>							
		tree/acre		kg/tree		Farm gate (SR/acre)	Farm gate (USD/ha)
Papaya		540		30	10	162.000	<b>30.780</b>
Banana		540		18	9	87.480	<b>16.621</b>
<b>Non irrigated root crop</b>							
				Yield (kg/m2)	Farm gate (SR/Kg)		Farm gate (USD/ha)
Cassava (non-irrigated)				2	18		<b>27.692</b>
<b>Investment in intensive greenhouse</b>							
						Net Income (SR/YR)	Net Income (USD/YR)
Greenhouse Tomato (8x20m=160m2)						66.500	<b>5.115</b>

The additional (conservative) assumptions in the setup of the irrigation model are: i) production cost equal to 60% of the farm gate price for all agricultural produce and ii) the crop pattern in the irrigated areas includes at least 40% of fruit crops and 40% of legumes/vegetables. The most representative crops considered for fruits are banana and pawpaw, while for vegetables a basket based on the 2011 census statistics is considered (by area, 5% beans; 1% capsicum; 10% cucumber; 20% Chillies; 37% Pumpkin; 18% Tomato; 9% Eggplant). The range of benefits expected as a result from the upgrading of the communal irrigation system to be financed by CLISSA post MTR are summarized in the table below:

**Table 6 – Benefits from irrigation scheme upgrading tested in the model**

Number	Without project	With project
1	At least 50% of the area under vegetables loses 1 of the 3 annual vegetable harvests	No vegetable crop lost during the dry season
2	One year of harvesting fruit trees is lost every 10 years	No fruit tree crop lost due to flooding/water logging
3	No possible expansion of irrigated area	5% expansion of irrigated area put under vegetables
4	No investment in intensive Greenhouses	Investments in intensive greenhouses triggered (1 greenhouse every 10 ha)

The 4 types of benefits listed in the table above are not, in principle, mutually exclusive, i.e. they may occur at the same time in the same location. The simulations on the irrigation model consider a combination of only two benefits deemed most relevant for each of the three selected irrigation schemes, in all cases including the improved productivity of vegetable crops during the dry season (Benefit n.1). The calculation of the IRR was based on the preliminary investment cost and command area for each scheme.

**Table 7 – IRR for selected irrigation schemes**

<b>Irrigation scheme</b>	<b>Target area (ha)</b>	<b>Estimated Investment cost (USD/ha)</b>	<b>Combination of Benefits tested</b>	<b>IRR (%)</b>
Grand Anse-Amitie (Pralin)	44	3,433	1 + 2	50.6
Valle D'Andor (Mahe)	15	4,911	1 + 4	47.1
Anse Boileau (Mahe)	25	5,292	1 + 3	38.4

The computed returns on investment are extremely high. Given the relatively high farm gate prices and profitability of irrigated fruit and vegetable crops, even what may be considered in absolute terms a high investment cost above USD 5,000 per ha, is highly justified by the monetary benefit stream generated. Moreover, the model shows that the expansion of irrigated areas (in Anse Boileau) and the private investments in greenhouses (in Valle D'Andor) drive up the computed IRR considerably (by 13.1% and 19.7% respectively).

In order to analyse the investments in upgrading of access roads, the analysis carried out was based on an annual yield (from cassava) of 20 ton/ha and on a cost of transport of 50 SR for a 45kg bag over a length of 600m of non-driveable road. Considering the maximum investment cost of USD 40,000/km (i.e. USD 24,000 for 600m), the simulations shows a linear dependency of the IRR with the volume of production, which, in turn, in the simplified model depends exclusively on the farm area served by the access road. Considering average conditions (3-4 ha served by a road) the IRR is in the range of 18 to 25%.

**Table 8 – IRR for access roads for different land sizes**

<b>Farm area served (ha)</b>	<b>IRR (%)</b>
1 ha	2,1
2 ha	11,1
3 ha	18,5
4 ha	25,3
5 ha	31,9

The IRR calculation sheets used for the simulations are reported in Annex 2 of this Working Paper.

### **Proposed detailed indicators for Component 3**

While the post MTR CLISSA will retain the Goal and the Development Objective of the original design, the targets and indicators relating to Component 3 have been reviewed by the MTR in order to reflect the detailed planning of activities and budget reallocation. The applicable 1st level (output) and 2nd level (outcome) RIMS indicators have been included in the post MTR Logframe. With specific reference to second level RIMS Indicators, the Logframe reports also the relevant parameters to be measured to support the assessments of Effectiveness and Sustainability.

OUTCOME/ OUTPUT	Key INDICATORS	MEANS OF VERIFICATION	ASSUMPTION S/RISKS
<b>Outcome 3:</b> Capacity of public service providers strengthened and technologies made available and public and small-scale collective infrastructure upgraded	<p>RIMS 2.2.1 - Effectiveness: Improved performance of (public) service providers (input stores, research, training institutions)</p> <ul style="list-style-type: none"> <li>• 20% increase in People trained with upgraded facilities/equipment at SIAH and SMA</li> <li>• 10% increase in sales from rehabilitated requisite stores</li> <li>• 20% of farmers at Grande Anse use Agricultural machine rental service)</li> <li>• New campaigns by MNRI Communication unit</li> <li>• New trials established at rehabilitated AB research station</li> <li>• 4 farmers/fishermen associations re-organize in line with technical and organizational audit</li> </ul> <p>RIMS 2.3.2 - Effectiveness: Improved access of the poor to financial services</p> <ul style="list-style-type: none"> <li>• New lending products made available for agriculture</li> </ul> <p>RIMS 2.1.2 - Effectiveness of productive infrastructure (irrigation schemes)</p> <ul style="list-style-type: none"> <li>• Increased cropping intensity for vegetables (at least 300%)</li> <li>• Private investments triggered (shade, greenhouses, on farm water storage, USD 3,000/ha)</li> <li>• No crops lost due to improved drainage</li> </ul> <p>RIMS 2.1.3 - Likelihood of sustainability of productive infrastructure (irrigation schemes)</p> <ul style="list-style-type: none"> <li>• Farmers income increase by 15%</li> <li>• Metering applied in 84 ha</li> <li>• Revised fee structure (at least 100% increase from baseline 100SR/month)</li> </ul> <p>RIMS 2.4.2 - Likelihood of sustainability of roads rehabilitated</p> <ul style="list-style-type: none"> <li>• Farmers saving on transport cost (USD/50 per ton)</li> <li>• Self help schemes active in rehabilitated road sections</li> <li>• New cross and longitudinal drainage structures constructed</li> </ul>	<p>Internal and external monitoring reports</p> <p>SAA GIS system and agricultural census data</p> <p>Beneficiary assessment reports</p>	<p>Implementing Agencies committed to implement the agreed activities</p> <p>Interest in PPP is sustained by all stakeholders</p>
<b>Output 3.1.</b> Public sector institutions supported through human resource capacity and equipment	<ul style="list-style-type: none"> <li>• <b>RIMS 1.2.1</b> Staff of (Public) service providers trained (3 MNRI Communication Unit, 25 SAA Officers and Extension agents, 10 AB research staff; 2 SIAH staff) TOTAL 50 people</li> <li>• <b>RIMS 1.3.4</b> Financial institutions participating in the Project (10 banks involved in workshop for managers)</li> <li>• Public service providers receiving new equipment (MNRI Communication Unit, AB Research station, SIAH, SMA, SAA GIS Headquarter) TOTAL 5 Offices/institutions</li> <li>• N.1 rental service for small agricultural equipment established at SAA</li> <li>• 4 farmers/fishermen associations audited</li> <li>• FBOA provides additional services for artisanal fishermen</li> </ul>	Internal monitoring reports	



<p><b>Output 3.2.</b>  Enabling rural infrastructure, including public investments in (irrigation distribution, access roads and construction of de-centralized requisite stores)</p>	<ul style="list-style-type: none"> <li>• <b>RIMS 1.1.5</b> Land under irrigation schemes constructed or Rehabilitated (100 ha)</li> <li>• N.7 irrigation schemes rehabilitated</li> <li>• 160 Farming HHs benefitting from rehabilitated irrigation schemes</li> <li>• Increase of irrigated area (5% of 84 ha = 4.2 ha)</li> <li>• <b>RIMS 1.4.2</b> Roads constructed/rehabilitated (2.5 km)</li> <li>• 20 Farming HH benefitting from roads</li> <li>• <b>RIMS 1.4.3</b> Market facilities constructed and/or rehabilitated (n. 4 de-centralized requisite stores)</li> </ul>	<p>Internal monitoring reports</p>	
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## **ANNEX 1- Grand Anse Mahe Requisite Store Construction Summary BoQ**

<b>PROJECT: PROPOSED REQUISITE STORE AT GRAND ANSE</b>		
<b>No.</b>	<b>DESCRIPTION</b>	<b>Amount (SR)</b>
<b>A</b>	<b><u>PRELIMINARIES</u></b> Provision of temporary services, vertical access, and temporary works etc.	167,000.00
<b>B</b>	<b><u>GROUND WORK</u></b> Site preparation including site clearing and cutting and removal of trees and tree trunks, and any rocks.	7,720.00
<b>C</b>	<b><u>SUBSTRUCTURE</u></b> Inclusive, excavating trench, termite treatment, blinding, blockwork wall, hardcore, DPC, concrete slab.	337,680.00
<b>D</b>	<b><u>WALLING AND FRAMING</u></b> External & Internal blockwork wall, concrete columns, lintels, and beam.	157,550.00
<b>E</b>	<b><u>ROOFING &amp; CEILING</u></b> Roofing timber structure and covering sheet, ceiling timber structure and plywood surface, and fascia board.	291,000.00
<b>F</b>	<b><u>OPENINGS</u></b> All doors and door frames wooden, all windows aluminium slide.	90,000.00
<b>G</b>	<b><u>STAIRS &amp; BALUSTRADE</u></b> All stairs shall be concrete and balustrade in metal.	45,190.00
<b>H</b>	<b><u>FINISHING</u></b> Floor screeding and tiling, wall plastering, wall and ceiling paint finish, cornices and skirting.	349,600.00
<b>I</b>	<b><u>FURNITURE</u></b> Wooden frame and fibre cement shelf built in, concrete and wooden sale counter, and built in kitchen sink cabinet.	131,200.00
<b>J</b>	<b><u>DISPOSAL</u></b> Foul water collection and disposal, inclusive drain pipe, manholes, septic tank and soakaway.	85,680.00
<b>K</b>	<b><u>PLUMBING SUPPLY</u></b> Provision and install Water supply (inclusive sink and water tank), and Bathroom facilities.	45,360.00
<b>L</b>	<b><u>ELECTRICAL SUPPLY</u></b> Provision and installation of all Electrical services for commercial supply.	32,420.00
<b>M</b>	<b><u>MECHANICAL SYSTEM</u></b> Provision and installation of all mechanical system (air condition units, ventilation fans) for commercial supply.	20,490.00
<b>N</b>	<b><u>EXTERNAL WORK</u></b> Paving concrete parking and fencing of compound.	85,340.00
<b>TOTAL ESTIMATED SUM (SR)</b>		<b>1,846,230.00</b>

## **ANNEX 2- Analysis of investments in infrastructure calculation sheets**

### **Upgrade of communal irrigation system - Grand Anse-Amitie (Pralin)**

Total area (ha)	1,00	
Vegetables mix (ha)	0,40	
Banana (ha)	0,20	
Papaya (ha)	0,20	
Non irrigated cassava (ha)	0,00	This is to be replaced by irrigated vegetables
Revenue from vegetables mix (USD/ha/year)	53098	
Revenue from Banana (USD/ha/year)	16621	
Revenue from Papaya (USD/ha/year)	30780	
Revenue from Cassava (non irrigated USD/ha/year)	27692	
Production costs/Revenue (%)	40%	
Net income from vegetables mix (USD/ha/year)	21239	
Net income from Banana (USD/ha/year)	6648	
Net income from Papaya (USD/ha/year)	12312	
Net income from Cassava (non irrigated USD/ha/year)	11077	
Incremental income from veg mix (%)	16	Dry season crop failure affecting 50% of vegetables on the basis of 3 cycles per year=33%*50%=16% yield increase in average
Incremental income from Banana (%)	10	One lost fruit tree crop in 10 years due to flooding
Incremental income from Papaya (%)	10	One lost fruit tree crop in 10 years due to flooding
Incremental Income from 1 ha shifting from non irrigated cassava to irrigated vegetables (USD/ha/year)	13560	
Incremental Income from shifting from vegetable mix to intensive tomato 160m2 greenhouse (USD/unit/year)	4776	
Density of new greenhouses (# of units per ha)	0,0	

Item	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8-20
Net incremental income from existing vegetables mix		1.359	1.359	1.359	1.359	1.359	1.359	1.359
Net incremental income from Banana		133	133	133	133	133	133	133
Net incremental income from Papaya		246	246	246	246	246	246	246
Net incremental income from new areas under vegetables		0	0	0	0	0	0	0
Net incremental income from new greenhouses		0	0	0	0	0	0	0
<i>Total incremental Income</i>		<i>1.739</i>	<i>1.739</i>	<i>1.739</i>	<i>1.739</i>	<i>1.739</i>	<i>1.739</i>	<i>1.739</i>
Investment cost (public investment only)	3.433							
<b>Net Benefit</b>	-3.433	1.739	1.739	1.739	1.739	1.739	1.739	1.739
IRR =	50,6%							
NPV @ 12%=	8.368							
Interest Rate for NPV	12%							



### Upgrade of communal irrigation system - Valle D'Andor (Mahe)

<b>Total area (ha)</b>	<b>1,00</b>	
<b>Vegetables mix (ha)</b>	<b>0,40</b>	
<b>Banana (ha)</b>	<b>0,00</b>	
<b>Papaya (ha)</b>	<b>0,00</b>	
<b>Non irrigated cassava (ha)</b>	<b>0,00</b>	<b>This is to be replaced by irrigated vegetables</b>
<b>Revenue from vegetables mix (USD/ha/year)</b>	<b>53098</b>	
<b>Revenue from Banana (USD/ha/year)</b>	<b>16621</b>	
<b>Revenue from Papaya (USD/ha/year)</b>	<b>30780</b>	
<b>Revenue from Cassava (non irrigated USD/ha/year)</b>	<b>27692</b>	
<b>Production costs/Revenue (%)</b>	<b>40%</b>	
<b>Net income from vegetables mix (USD/ha/year)</b>	<b>21239</b>	
<b>Net income from Banana (USD/ha/year)</b>	<b>6648</b>	
<b>Net income from Papaya (USD/ha/year)</b>	<b>12312</b>	
<b>Net income from Cassava (non irrigated USD/ha/year)</b>	<b>11077</b>	
		<b>Dry season crop failure affecting 50% of vegetables on the basis of 3 cycles per year=33%*50%=16% yield increase in average</b>
<b>Incremental income from veg mix (%)</b>	<b>16</b>	
<b>Incremental income from Banana (%)</b>	<b>10</b>	<b>One lost fruit tree crop in 10 years due to flooding</b>
<b>Incremental income from Papaya (%)</b>	<b>10</b>	<b>One lost fruit tree crop in 10 years due to flooding</b>
<b>Incremental Income from 1 ha shifting from non irrigated cassava to irrigated vegetables (USD/ha/year)</b>		<b>13560</b>
<b>Incremental Income from shifting from vegetable mix to intensive tomato 160m2 greenhouse (USD/unit/year)</b>		<b>4776</b>
<b>Density of new greenhouses (# of units per ha)</b>		<b>0,2</b>

Item	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8-20
Net incremental income from existing vegetables mix		1.359	1.359	1.359	1.359	1.359	1.359	1.359
Net incremental income from Banana		0	0	0	0	0	0	0
Net incremental income from Papaya		0	0	0	0	0	0	0
Net incremental income from new areas under vegetables		0	0	0	0	0	0	0
Net incremental income from new greenhouses		955	955	955	955	955	955	955
<b>Total incremental Income</b>		<b>2.314</b>	<b>2.314</b>	<b>2.314</b>	<b>2.314</b>	<b>2.314</b>	<b>2.314</b>	<b>2.314</b>
Investment cost (public investment only)	4.911							
<b>Net Benefit</b>	<b>-4.911</b>	<b>2.314</b>	<b>2.314</b>	<b>2.314</b>	<b>2.314</b>	<b>2.314</b>	<b>2.314</b>	<b>2.314</b>
<b>IRR =</b>	<b>47,1%</b>							
<b>NPV @ 12%=</b>	<b>10.836</b>							
Interest Rate for NPV	12%							

### Upgrade of communal irrigation system - Anse Boileau (Mahe)

<b>Total area (ha)</b>	<b>1,00</b>	
<b>Vegetables mix (ha)</b>	<b>0,40</b>	
<b>Banana (ha)</b>	<b>0,00</b>	
<b>Papaya (ha)</b>	<b>0,00</b>	
<b>Non irrigated cassava (ha)</b>	<b>0,05</b>	<b>This is to be replaced by irrigated vegetables</b>
<b>Revenue from vegetables mix (USD/ha/year)</b>	<b>53098</b>	
<b>Revenue from Banana (USD/ha/year)</b>	<b>16621</b>	
<b>Revenue from Papaya (USD/ha/year)</b>	<b>30780</b>	
<b>Revenue from Cassava (non irrigated USD/ha/year)</b>	<b>27692</b>	
<b>Production costs/Revenue (%)</b>	<b>40%</b>	
<b>Net income from vegetables mix (USD/ha/year)</b>	<b>21239</b>	
<b>Net income from Banana (USD/ha/year)</b>	<b>6648</b>	
<b>Net income from Papaya (USD/ha/year)</b>	<b>12312</b>	
<b>Net income from Cassava (non irrigated USD/ha/year)</b>	<b>11077</b>	
<b>Incremental income from veg mix (%)</b>	<b>16</b>	<b>Dry season crop failure affecting 50% of vegetables on the basis of 3 cycles per year=33%*50%=16% yield increase in average</b>
<b>Incremental income from Banana (%)</b>	<b>10</b>	<b>One lost fruit tree crop in 10 years due to flooding</b>
<b>Incremental income from Papaya (%)</b>	<b>10</b>	<b>One lost fruit tree crop in 10 years due to flooding</b>
<b>Incremental Income from 1 ha shifting from non irrigated cassava to irrigated vegetables (USD/ha/year)</b>	<b>13560</b>	
<b>Incremental Income from shifting from vegetable mix to intensive tomato 160m2 greenhouse (USD/unit/year)</b>	<b>4776</b>	
<b>Density of new greenhouses (# of units per ha)</b>	<b>0,0</b>	

Item	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8-20
Net incremental income from existing vegetables mix		1.359	1.359	1.359	1.359	1.359	1.359	1.359
Net incremental income from Banana		0	0	0	0	0	0	0
Net incremental income from Papaya		0	0	0	0	0	0	0
Net incremental income from new areas under vegetables		678	678	678	678	678	678	678
Net incremental income from new greenhouses		0	0	0	0	0	0	0
<i>Total incremental Income</i>		2.037	2.037	2.037	2.037	2.037	2.037	2.037
Investment cost (public investment only)	5.292							
<b>Net Benefit</b>	-5.292	2.037	2.037	2.037	2.037	2.037	2.037	2.037

IRR = 38,4%

NPV @ 12% = 8.674

Interest Rate for NPV 12%

### Upgrade of access road

			ha	IRR (%)
Total area served (ha)	2		1	2,1
Average yield (ton/ha)	20	Cassava, vegetables	2	11,1
Road length (m)	600		3	18,5
Cost of transport (SR/kg)	1		4	25,3
Annual volume of production (tons)	40		5	31,9
Annual cost of transport (SR)	40000		6	38,4
Annual cost of transport (USD)	3077			
Cost of road rehabilitation (USD/km)	40000			

Item	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8-20
Net transport savings		3.077	3.077	3.077	3.077	3.077	3.077	3.077
Total savings		3.077	3.077	3.077	3.077	3.077	3.077	3.077
Investment cost	24.000							
<b>Net Benefit</b>	-24.000	3.077	3.077	3.077	3.077	3.077	3.077	3.077
IRR =	11,1%							
NPV @ 12%=	-1.193							
Interest Rate for NPV	12%							