



Food and Agriculture
Organization of the
United Nations



PROGRAM MDG1c REDUCING HUNGER IN MOZAMBIQUE



CASE STUDY

Reducing food insecurity and malnutrition through a multisector approach – experiences from the Programme MDG1c

Rationale

Despite Mozambique's extraordinary economic growth after 1992 when the GDP growth rate soared from almost 0% in 1981-1992 to 7% in the period 2010-2015, food insecurity and malnutrition remain at high levels. One third of the population is affected by chronic food insecurity, while nearly half of children under 5 years old suffer from chronic malnutrition¹. What is worrying is that this prevalence has remained almost stagnant in the past decade. Data from the 2011 Demographic and Health Survey (DHS)² estimated the chronic malnutrition prevalence at 43% against 48% in the 2003 DHS. The latest data available from SETSAN, 2013, confirm that this prevalence has not changed. The causes of malnutrition and food insecurity are multi-faceted and are related to the individual food and nutrient intake and health status, which in turn is determined by insufficient access to food, clean water, sanitation and health services, girl's education and gender issues and poverty. This makes clear, that addressing food insecurity and malnutrition requires integrated solutions.

Based on the analysis above and considering that attainment of food and nutrition security is one of its priorities, the Government of Mozambique, in 2011 in partnership with Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD) and United Nations World Food Programme (WFP), designed the multi-sector initiative aimed at accelerating the attainment of the MDG1c over the 2015 horizon (the programme "Accelerate Progress Towards Millennium Development Goal MDG1c") which was presented and approved by EU for funding.

The multisector approach in the context of the Programme MDG1c was defined as a comprehensive set of interventions (Result Components-RC) addressing at the same time the different determinant factors of food security and nutrition

(food availability, access and utilization), with actions spanning across different sectors (Agriculture, Health, Education, Fishery) and implemented in a coordinated manner seeking complementarities and synergies. *(The programme design by pillars and result components is summarized in the Figure 1 in Annex).*

The Programme was built on topping up existing programmes being implemented by the governmental sectors with the support of the three UN Agencies (FAO, IFAD and WFP). But, in practice, this topping-up of existing programmes has brought challenges to the effective implementation of the proposed multi-sector approach, particularly making complicated the adequate complementarity and integration of actions and the targeting. Challenges will be further described below.

Implementation

The programme was implemented from the end of 2012 until the first semester 2019. However not all activities were implemented for the same period, some activities such as Nutrition education and SBCC started only in 2015-2016. The direct responsibility for the implementation fell under the three United Nations Rome-Based Agencies (RBA): FAO, IFAD and WFP, which directly assisted the various line Ministries (Agriculture, Health, Fisheries, Education, Commerce and Industry) involved in the FNS activities, which were one of the main implementing actors in the field.

The Technical Secretariat for Food and Nutrition Security (SETSAN) had the role of coordination, reporting and monitoring the programme, but also coordination with other relevant donors and programmes. The programme was implemented in 76 Districts in 10 Provinces, although not all components were present across all districts.

¹SETSAN 2013

²<https://dhsprogram.com/publications/publication-FR266-DHS-Final-Reports.cfm>

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Achievements and contribution to outcomes

Impact evaluations³ showed that programme components contributed to the improvement of the household food security situation of the beneficiaries, as illustrated in Figure 1.

Figure 1: Programme MDG1c main FNS outcomes across the three pillars

Impact on food security and nutrition

Improved household food security:

- Lower poor or borderline food consumption (measured by FCS) in beneficiary households: 5.6% vs 11.4% (control group)
- Number of days of consumption of more nutritious food groups (chicken meat, fish, Vit A rich vegetables and fruits), significantly higher among beneficiary households than in the control group

Potential to reduce malnutrition:

The proportion of stunted under five children was 3% to 5% lower among beneficiaries, but differences to the control group were not statistically significant.

Pillar I: Food Availability

Reduced % of households with less than four months food reserves

Beneficiaries : 36.1%
 Control group : 44.1%
 Significant difference

Increase productivity and production of staple food crops for farmers involved by 10%

Increased maize productivity by +17% for e-voucher package A and +78% for package B

Increase production of fish

Number of families producing fish in fish ponds increased 6th fold (from 262 to 1950)

Qualitative evidence on increase in the volume of captured and commercialized fish by artisanal fishfolks

Pillar II: Food Access

Reduced share of food consumption in total expenditure of households in lower income groups

No specific data available, but indications that higher food production and income among beneficiaries, reduced the food expenditure share

Increment of smallholder's income coming from market sells

PROMER: Rural traders improved their financial capacities
 E-voucher beneficiaries improved their income by 4,800 MZN
 Qualitative evidence on the increased outcome among members of farmer associations and artisanal fishermen supported by the programme

Pillar III: Nutrition

Improved health and nutrition practices

Children 6-23 months diet diversity: 50.2% beneficiaries, 42.4% control group (No sig. Difference)
 Women dietary diversity: 2017: 28%, 2018: 40% (PROMER area)
 Adolescent girls dietary diversity: 2017: 55%, 2018: 68% (PROMER)
 Use of latrines and child's hand washing: + 20%

Improved health and nutrition knowledge

Increase in 20%-40% in the knowledge on malaria and diarrhea prevention, hand washing and pregnancy care. Knowledge on exclusive breastfeeding and adequate complementary feeding has also improved

Improved access to fortified food: wheat flour, maize flour, sugar and oil

(In process through the National Food Fortification Programme)

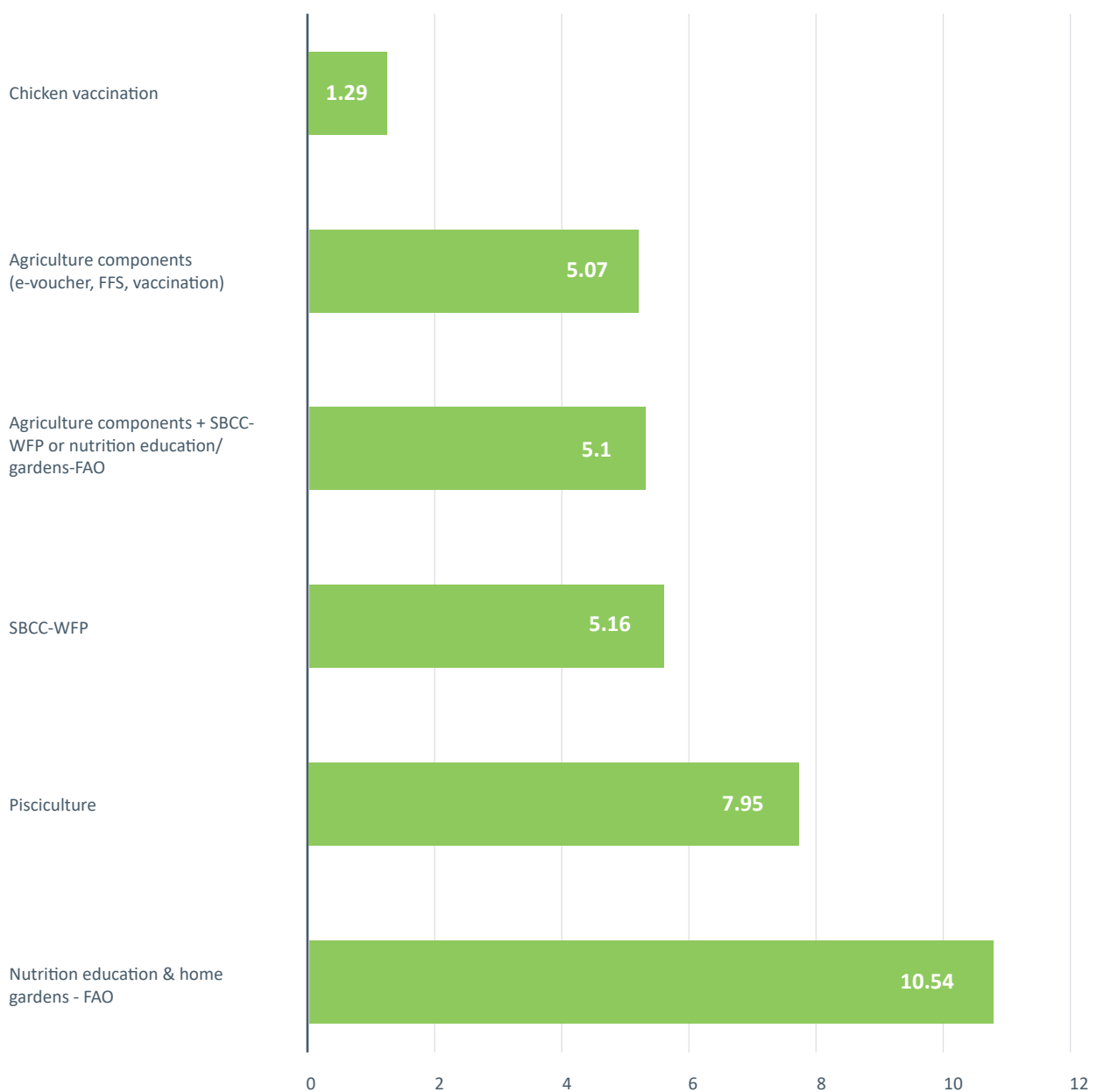
³ SETSAN (2018). Relatório da Avaliação Final de Segurança Alimentar e Nutricional 2013-2018 do Programa ODM 1C em Moçambique.
 SETSAN (2018). Relatório de Avaliação Interna do Programa ODM 1c, Setembro-Outubro 2018.

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Interestingly, the higher positive difference in the mean value of FCS and HDDI (Figures 2 and 3) was found for the combination of nutrition education and home gardening, followed by aquaculture⁴, SBCC and the combination of SBCC/Nutrition education with agriculture components (e-voucher, Farmer Field Schools - FFS, poultry vaccination). This finding would

be indicating that integrating home gardens or agriculture interventions with SBCC or nutrition education renders higher effects, which supports the programme's hypothesis that multisector approach is the best option to address food and nutrition insecurity.

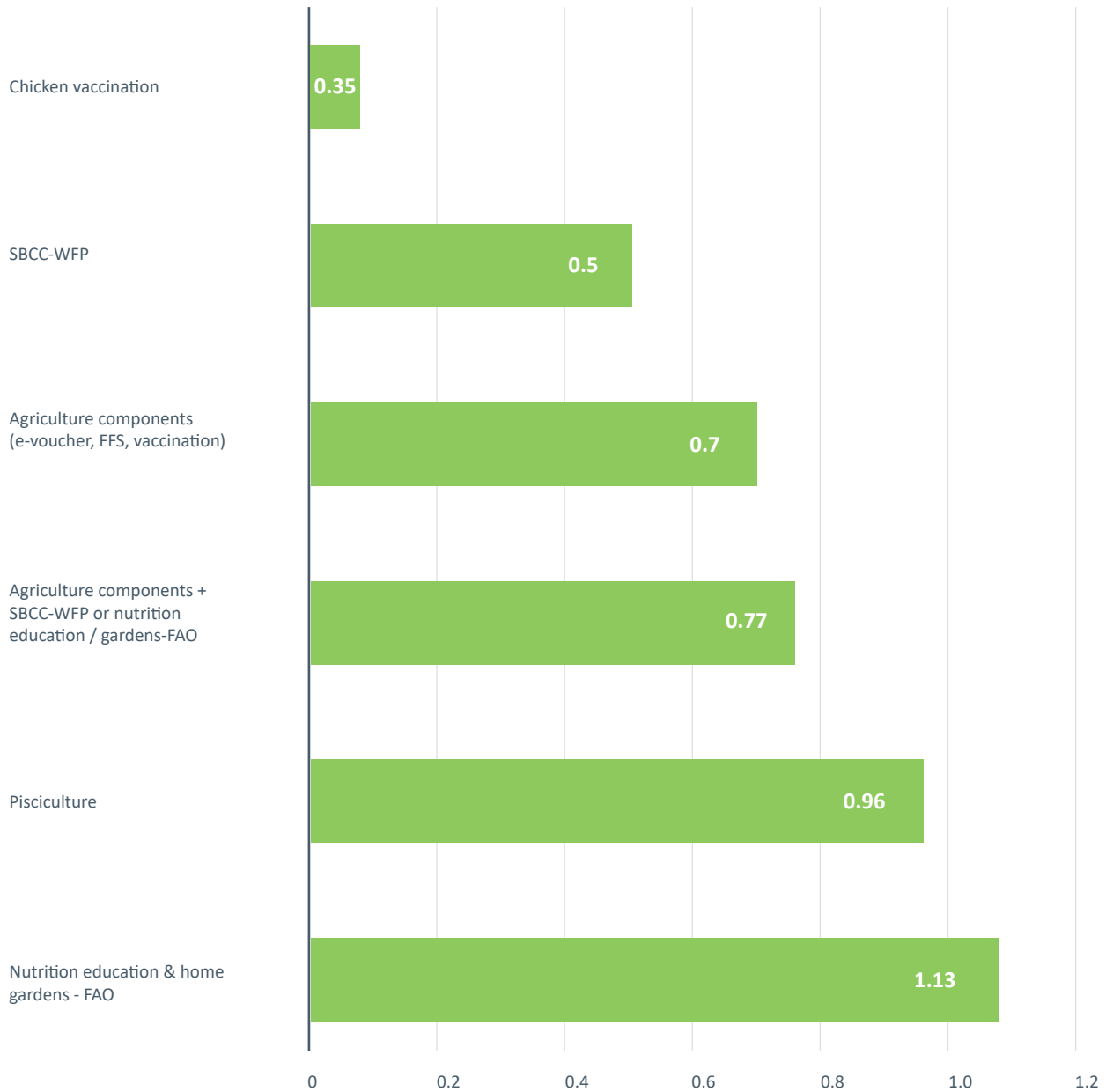
Figure 5: Difference in the mean value of FCS between beneficiary and control groups (points)



⁴Fish production in ponds

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Figure 6: Difference in the mean value of HDDI between beneficiary and control groups (points)



As to nutrition status, there was also a reduction in the prevalence of chronic malnutrition but differences between beneficiaries and control groups were not significant. The relatively short period of exposure to SBCC and nutrition education components, and the influence of other determinant factors of chronic malnutrition (water, early pregnancies, women education, etc.), that were not directly address by the programme, could be some factors explaining this apparent low contribution to the nutrition situation.

Programme also contributed to the resilience of the communities increasing for instance their knowledge on disease prevention practices, increasing the crop production that allowed families to better cope with the lean season and periods of crisis, and building community assets such as irrigation schemes, water harvesting systems and roads.

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Best practices and lessons learned

Based on both the best practices and challenges from the Programme MDG1c, below are some key lessons learned, that may assist to design more efficient and effective FNS multisector programmes in the future.

1. In practice implementing multisector approach at national scale is very challenging, context specific planning and implementation seems to be one of the more effective and efficient ways to apply and combine different interventions.

While it is recognized that multisector programmes are necessary to overcome the multiple determinants of food insecurity and malnutrition, the practical implementation of such interventions pose complexities and challenges (as demonstrated by the MDG1c). Multisectoral programming is difficult when planning systems are sector based and centralized. Centralized planning and budgeting do not give the sectors the flexibility to tailor the interventions to the needs of local populations, for that a more decentralized planning systems are necessary. Decentralized planning would allow a context specific situation analysis to select the best combination of interventions to render the major impact, at the same time it would allow better convergence, complementarity and coordination among actors. Yet, without certain level of budgetary autonomy and local capacity, even decentralized plans cannot be fully implemented.

2. Strong governance, including coordination mechanisms are required at all levels from national to local to facilitate multisector programming and implementation.

Multi-sectoral and multi-stakeholder coordination platforms at national level can serve as forums to strengthening harmonization of approaches, collaboration and complementarity. At local levels these coordination structures can serve for operational planning, monitoring and evaluation of achievements. The role of a coordination bodies like the future CONSAN and the SETSAN is key in this regard, but they need to be strengthened and given enough power to convene all sectors involved in FNS.

3. Multisector programme implementation requires strong capacity building in topics, methods and approaches to implement effective programmes.

Multisector engagement require additional capacity building in topics related to nutrition and the various dimensions of food security, but also on ways to interact with different types of target groups (women, children, men, leaders). The Programme MDG1c has demonstrated for instance, that once trained in nutrition, agricultural extension workers have the potential to disseminate nutrition messages at wider scale with lower operational investments.

4. One of the promising ways to operationalize multisector approaches for FNS is the nutrition-sensitive programming into non-nutrition sectors, but this require minimum guiding principles.

The MDG1c has demonstrated that including nutrition dimension in productive sectors has an important added value in terms of enhancing the effects of productive investments on the FNS situation, by helping to translate the productivity achievements in better food consumption. However, the inclusion of nutrition dimension in non-nutrition sectors requires skills, advocacy work, careful planning and proper monitoring and evaluation.

5. Selecting few interventions based on the context is more realistic and feasible to operationalize than very comprehensive, ambitious programmes.

MDG1c was quite ambitious both in scope and geographical coverage. The complexity of the programme made difficult a proper coordination, complementarity and building synergies. Thus, not all districts and communities benefited from multisector interventions. There is evidence pointing that to be successful a multisector programme should focus on fixed areas where the same target groups are beneficiaries of multiple interventions⁵. This is more feasible through programmes with few well focused interventions based on a deep understanding of the context.

6. Appropriate targeting criteria is key to ensure that the target groups are receiving the multi-sector interventions at the same time.

Evidence shows that greater improvements in food security and nutrition are achieved when same communities and same households are benefited from multisector interventions ideally during the same period. This approach can be challenging to implement in practice. This was the case of the MDG1c that was built based on ongoing programmes implemented by different sectors that had defined targeting criteria. To improve this, the programme selected common entry points for the various interventions, being these, the community level organizations (farmer associations, FFS, mothers groups) that benefited from the different interventions.

6. Engagement at all stages with national government and civil-society stakeholders is critical to ensuring sustainability and ownership.

From the design stage, engaging with national and subnational government and civil society organisations is required to ensure alignment with national priorities and needs and to assure long-lasting ownership of the programme activities and goals. Community organizations could be also a good entry points to deliver multisector services.

⁵ For instance, the evaluation of the Zero Hunger Plan in Guatemala, found that higher reduction of stunting was achieved among the households that benefited from several interventions at the same time (IFPRI). In the same line the MDG1c community level evaluation found that higher improvement in the household food consumption was achieved among households that received agriculture/pisciculture interventions integrated with nutrition education.

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7. Cross cutting issues like gender and resilience to climate change should be considered across the whole programme cycle.

Both issues are critical aspects to ensure higher effectiveness, impact and sustainability of multisector programmes aiming at reducing food insecurity and malnutrition. Gender and resilience considerations should be included from start up, in the design process by incorporating a comprehensive situation analysis, objectives, indicators and intervention proposals to promote gender equity and long-term resilience. In the implementation phase, adjustments should be made to ensure that programme activities are delivered considering these aspects as cross cutting. Monitoring and evaluation should make sure that appropriate information is collected and analysed disaggregated by gender and incorporating data on the contribution to build resilience in the communities.

Challenges and opportunities

There are opportunities not only to continue but also to scale up some of the programme's interventions through nutrition sensitive productive and market-oriented investments, as follows:

- The three governmental programmes supported by IFAD will continue for the next years, including nutrition sensitive investments. Two new governmental initiatives are being designed with the support of IFAD: The Small-Scale Aquaculture Development Project (PRODAPE) which will be a kind of scaling up of the PROAQUA project, and the Agri-Food Value chains Development Programme (PROCAVA) which aims at increasing net incomes from climate-resilient agri-food value chains. Both project designs have incorporated pathways for nutrition outcomes, nutrition sensitive objectives and indicators.
- From early 2017 onwards the FAO GEF project has continued the Farmer Field Schools (FFS) approach in various districts (in Tete, Sofala and Manica provinces) responding challenges in agricultural production as a result of climate change. FAO will further extend elements of its MDG1c activities in 10 districts of the Nacala corridor (5 in Nampula province and 5 in Zambézia province). The new programme (PROMOVE Agribiz, jointly implemented with GIZ) is funded by the European Union under the 11th EDF and will be complementary to the nutrition activities (PROMOVE Nutrição) which are being already implemented in the same provinces by UNICEF and its partners.

- In terms of FNS policy the new ESAN III provides the strategic framework for multisector action in FNS, providing a key opportunity to incorporate lessons learned and best practices of MDG1c in the sub-sequent FNS plans. Some components of the MDG1c, such as Seeds sector strengthening, FFS, Food Fortification, SBCC and Nutrition Education at Schools are part of the national policies and programmes, and receive high attention, which will guarantee their continuity.

Challenges for sustainability:

- Despite that staff of national institutions were trained and equipment in many cases provided, the limited financial resources in the public sector will be a constraint to implement activities at the same level than under the MDG1c.
- It is likely that some trained community agents will become less active without institutional support. For instance vaccinators depend on the availability and distribution of NCD vaccines by the SDAE office to be able to continue their activities⁶. Similarly, seed producers depend on the provision of basic seeds to multiply. Health committees and care group mothers would become less active, lacking institutional support in terms of additional training, follow up and supervision.

⁶ Vaccinators are being paid 1 metical per applied vaccine, which multiplied for the number of chicken that every vaccinator could reach results into a good income to perform this activity as interviewed vaccinators have declared.

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Annex

Figure : Programme MDG1c Pillars and associated components

Main Goal:

Halve between 1990 and 2015 the proportion of people who suffer from hunger in Mozambique.

PILLAR I: Food Availability: Enhance Agricultural and Fisheries Productions

RC 1: Support to seed sector (FAO)
RC 2: Access to agriculture inputs (FAO)
RC 3a: Relevant advisory services (FAO)
RC 3b: Program to Support PRONEA (PSP) (IFAD)
RC 4: Poultry vaccination against New Castle disease (FAO)
RC 5: Aquaculture (PROAQUA) (IFAD)
RC 6: Artisanal Fisheries (ProPESCA) (IFAD)

PILLAR II: Improve Access to food

RC 7a: Market access for improved incomes (PROMER) (IFAD)
RC 7b: Market access through farmer associations (WFP)
RC 8: Smallholder farmers' storage facilities (FAO)
RC 9: Higher value fish produced and marketed (ProPESCA) (IFAD)
RC 10: Road and electricity infrastructure for agricultural and fish marketing (PROMER, ProPESCA) (IFAD)
RC 11a: Access to financial services (PROMER) (IFAD)
RC 11b: Access to financial services (ProPESCA) (IFAD)
RC 12: Commodity exchange and market information (WFP)

PILLAR III: Improve nutritional status of vulnerable groups

RC 13: Food fortification of staple foods (WFP)
RC 14a: PAMRDC in Manica developed (WFP)
RC 14b: Social Behaviour Change Communication (SBCC) in Manica province (WFP)
RC 16a: Nutrition Education and home gardens at community level (FAO)
RC 16b: Nutrition Education in Schools (FAO)
RC 16c: Nutrition Education (IFAD)
RC 17: Food assistance in emergencies (WFP)



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