

# REPUBLIC OF MADAGASCAR

## LAND SECURITY AND SUSTAINABLE RURAL DEVELOPMENT PROJECT

### EXECUTIVE SUMMARY

July 2005

#### I. INTRODUCTION

1. An International Fund for Agricultural Development (IFAD) mission, pursuant to terms of reference dated 20 May 2005, visited Madagascar from 6 to 30 June 2005 to formulate a new development project in the western part of the country (Menabe and Melaky regions), with a view to contributing to rural poverty reduction there. This mission followed on an earlier identification mission that visited the country from 22 November to 10 December 2004.
2. The new project would complete the portfolio of IFAD interventions in Madagascar (Northeast Agricultural Improvement and Development Project – PADANE, Upper Mandrare Basin Development Project – PHBM II, Rural Revenue Promotion Programme – PPRR) within the framework of the strategic directions set by the Malagasy authorities. It falls within the area of agricultural development, focusing on the poor and vulnerable areas of the West, under an approach that combines decentralized land tenure security with optimizing rural production (specifically in small watersheds), taking into account environmental protection and the development of marginalized populations moving into watersheds and isolated areas out of necessity.
3. The project's identification report was sent in February 2005 to the IFAD Project Support Office of the Agriculture Ministry (MAEP), which forwarded it on to the Interministerial Support Group set up with representatives of the Ministry, the Action Plan for Rural Development (PADR) Permanent Steering Team (EPP) and the Multi-Donor Secretariat (SMB) for purposes of analysis and to formulate observations on the questions of intervention, content and options in terms of territorial implementation proposed for the new project. Comments were shared with IFAD in April 2005 and discussed during the start-up meeting for the formulation mission held at MAEP on 8 June 2005.
4. The IFAD-MAEP formulation mission made successive field visits to the regions of Melaky (from 11 to 18 June 2005) and Menabe (from 19 to 23 June 2005), making contacts and holding discussions and working meetings with regional leaders, regional rural development directorates (DRDRs), deconcentrated services [provided by subnational units] and representatives of civil society, NGOs and service providers. A feedback meeting to discuss the mission aide-mémoire took place at MAEP on 29 June 2005.

#### II. THE NATIONAL CONTEXT AND POVERTY

5. **General context.** The island of Madagascar covers a total area of 587 841 km<sup>2</sup>. The population, estimated at 16.4 million inhabitants in 2003, is growing at an annual rate of approximately 2.8%. Close to 78% of the population live in rural areas and derive their livelihood from small farms averaging less than 1.2 ha. The population is unevenly distributed, with half concentrated in the regions of the Centre (highlands) and Eastern Coast, where population density exceeds 50 per km<sup>2</sup> in some cases, although they occupy less than one third of the country's surface area. Based on National Statistics Institute data (1993 Census), at the rate of 1.5% in rural growth and 4.7% in urban growth,

the population will reach nearly 21.5 million in 2015. Madagascar is one of the world's poorest countries, with estimated GDP per capita of USD 290. Madagascar is characterized by great biodiversity as well as both cultural and socioeconomic diversity. The economy is essentially rural, and agriculture remains the main engine of economic development. Economic activity has stagnated in recent decades, particularly in rural areas. Poverty is essentially a rural phenomenon in Madagascar. Rice growing is the major economic activity, and some 10 million people depend upon it for their livelihood and nutrition.

5. **Economic policy.** Under the economic and social recovery programme implemented by the Government after the 2002 political crisis with financial support from its development partners (USD 2.4 billion over four years), 2003 was marked by a return to growth (on the order of 6%) and inflation dropped to 7%. Since early 2004, however, the recovery has shown signs of slowing. In a major devaluation, the FMG lost nearly half its value with respect to the US dollar (currently USD 1 = FMG 9 500 or Ariary 1 900). The Poverty Reduction Strategy Paper (PRSP) completed in June 2003 sets forth medium to long-term priorities to raise standards of living for the rural poor, build institutional capacity and develop basic infrastructure. In order to halve the poverty rate within 10 years, the macroeconomic framework points up the need for public investment to be mobilized in the amount of Ariary 2 670 billion (about USD 1.9 billion) for the period 2005-2007. A net economic upturn in the rural sector is therefore a sine qua non if the country is to realize its dual objective of overall economic growth of 6% to 7% (impossible to achieve without the agricultural sector's contribution) and halving poverty within the space of 10 years.

6. **Profile of rural poverty.** According to the 2001 survey on poverty in Madagascar, the incidence of poverty (i.e., the proportion of the population with incomes below the poverty line of FMG 988 600) was 69.6 % nationally but 85.5 % in rural areas. As well as a rural phenomenon, poverty is also and above all an agricultural phenomenon, since households that derive their livelihood mainly from agriculture are invariably the poorest. This kind of poverty is strongly correlated with the small surface areas cultivated (64.3% of rural households have less than 1 ha of land) and low agricultural productivity and yields, even under irrigation. The situation with respect to access to basic social services is of great concern in all respects (93% of rural households and 67% of urban households lack access to running water and less than one third have access to adequate sanitation). There is no question that the situation was exacerbated by the severe impoverishment unleashed by the events of 2002. Small producers have borne the brunt of this and have the greatest difficulties recovering from natural and economic shocks. Generally speaking, the current poverty levels reflect a deep-seated crisis in the traditional monetary economy.

7. Malnutrition, which is relatively severe in some regions of Madagascar, covers both overall malnutrition (as manifested in stunted growth, low body weight and emaciation) and deficits such as vitamin A deficiency, anemia and diseases caused by a lack of iodine, among others. It is characterized by devastating consequences, weakening immune systems and aggravating diseases. Health is substandard, with a high prevalence of malaria (40% of consultations at health centres) and HIV-AIDS (about 10% of the population). In 2003, infant mortality was on the order of 84 per 1,000 births according to World Bank statistics. Inadequate health care coverage, with just one basic health centre per commune, is an obstacle to disseminating information on disease prevention. This situation is exacerbated by limited schooling and illiteracy.

8. **Vulnerable groups.** The most vulnerable groups in rural areas are small farmers, households whose heads have no schooling, households with large families or elders, landless farmers and producers of export products subject to price variations on world markets. The most affected groups are, above all, women (who account for 55% of the population and 80% of the economically active population) and children under five years of age. From the sociocultural and agro-economic perspective, five main target groups can be identified: (i) rural households of landless agricultural wage earners; (ii) rural households dependent upon hillside cropping; (iii) rural households in isolated areas that do not benefit directly from services in communal seats; (iv) rural households dependent on cattle raising; and (v) those dependent upon forest resources.

9. **Gender issues.** That women are highly vulnerable is clear in health, nutritional and socioeconomic indicators. According to the anthropometric survey conducted by the National Statistics Institute in 2004, just over one quarter of women aged 15 to 49 are seriously underweight, while two thirds are considered to enjoy normal nutritional status. Demographic and health surveys show that the status of mothers' health is nothing short of alarming. Among the priorities set by the Government is to seek economic and social development based on equality and accountability for all population segments. Nevertheless, political intentions and legislative measures do not appear to have had the expected impact in practical terms thus far. Rural women in Madagascar typically belong to poor or very poor households, which account for over 70% of those in rural areas. Among the ethnic groups of the southern and western parts of the country, women cannot inherit land. If they work for third parties, they are paid 70% of what a man earns, at best. Women generally perform the household's income-generating activities (75% of Malagasy households state that they are engaged in such activities). Women bear the brunt of poor quality health and education services in rural areas. Moreover, women are clearly at a disadvantage when it comes to access to information, training and technical knowledge.

10. **The agro-pastoral sector.** Madagascar's economy is rurally based, with two thirds of its 16 million inhabitants involved in agriculture, which however contributes just one quarter of GDP (rising to 43% if one takes into account livestock raising, fishing, forestry and downstream agroindustries). The main crops are irrigated rice (40% of cultivated area) and, to a lesser extent, cassava, maize and rain-fed rice. Other crops are grown for export and industry, principally coffee, cloves and vanilla (along the eastern coast), and cotton, sisal and sugar cane (in other areas). The breeding of livestock, mainly cattle, practised extensively and in combination with small ruminants, is a significant economic activity in dry areas and on grassy savannah in the southern and western parts of the country, but has little economic impact given the extensive grazing method. Despite its clear potential, agricultural productivity has stagnated in recent decades, causing widespread rural poverty. Moreover, deteriorating security in rural areas, particularly in the western region, places heavy constraints on development to the detriment of the populations concerned.

11. **Specific sector context in the regions of Menabe and Melaky.** Agriculture and livestock raising predominate in these two regions. The major crops are foodstuffs, mainly rice. Close to 55 000 ha are under cultivation, of which 33 000 ha in foodstuffs (25 000 ha of cultivated rice over both growing seasons). Cash crops are limited to about 800 ha of tobacco and, in some cases, groundnuts and lima beans. Fruits and vegetables are limited to a few market garden plots around towns and some family gardens. Estimated production in the project areas is 67 000 tons of foodstuffs, or less than 2 tons per household on average, with substantial differences between families with access to irrigated plots, who are able to grow two cycles of rice, and those without. On average, this corresponds to 5 kg of food products per family per day.

12. **Farming systems.** The great majority of farming systems are subsistence-based. Cultivated area is on the order of 0.5 to 2 ha (about 1 ha on average), with 75% to 80% of land used for foodstuffs (mainly rice and cassava). Overall, current technologies use very few inputs, genetic material is poor, fertilization is limited to a few treatments on rice fields, manure or compost is used on market crops where livestock is present, pesticide use is limited, and very few farmers own any equipment. Intensive systems such as the System of Rice Intensification (SRI) and System of Rice Improvement (SRA) are infrequently followed, and as a result yields remain modest (700 to 800 kg/ha for rain-fed rice and 1.5 to 2 tons/ha for irrigated rice). Moreover, post-harvest losses are relatively high. Cash crop plantations are also very extensive (few new plantations and little maintenance), yields are low and many people have reverted to the traditional gathering economy. Practices such as slash and burn farming, forest clearing, brush fires and illicit forestry continue in use.

13. **Impact of land tenure on agricultural development.** Generally speaking, land security for farmers is a sine qua non for any productive investment. Land security must progress such that assurances exist that farmers will be able to work their land under a recognized certificate of ownership,

or a legally recognized long-term lease (with an indicative duration of 10 years for cropping areas, and longer for planting or reforestation areas) where farmers are not owners. Such assurances are imperative for farmers to be able to enrich and even maintain the land (using fertilizers, regular weeding, etc.), to invest in production (zebus, farm equipment), to plant fruit trees or reforest, and to make sustainable investments in diversification workshops or crop intensification programmes. Such assurances will also be required by banks when farmers must ask for an investment loan, and this is one of the conditions for access to credit. This is clearly an important prerequisite for households farming irrigated plots and fertile alluvial *baiboho* land, and for producers wishing to invest in diversification and intensification programmes introduced by the project. It is also important for other groups of producers wishing to make a sustainable investment in farming hillside slopes, who will need to contribute to conservation measures before engaging in annual cassava or maize cropping, and even more so for agroforestry, reforestation or fruit tree plantations.

14. **Rural infrastructure.** Studies under the Sector Transportation Programme (PST) have clearly identified the more isolated areas and thereby the regional and local dimensions of the deficit in rural road infrastructure. In addition, in the 2001 EPM household survey, 59% of farming households indicated that civil safety conditions were poor and the risk of theft high in their areas. The current situation in terms of rural infrastructure in the two regions of Menabe et Melaky, and the need for upgrading, is presented in Annex 3. The African Development Bank (AfDB) has decided to finance the rehabilitation of Routes 34 and 35 serving the western portion of the country, Menabe in particular, which will help to open up this area and improve transportation. The new IFAD project is also to establish a collaboration agreement respectively with the European Union ACORDS Programme and the FID-IV Community Development Project, each of which will contribute to developing communal and intercommunal infrastructure and collective equipment, particularly in Menabe.

### III. INSTITUTIONS AND ORGANIZATIONS

15. **Political and institutional context.** Institutional reform efforts in rural development and food security in Madagascar (cf. European Commission mission report of November 2003) include reorganization of the MAEP (pursuant to a January 2004 decree establishing its powers and organization around three thrusts: deconcentration, downsizing of central departments, restructuring and strengthening of interregional and regional rural development divisions (DIRDR/DRDR). The aim is to open up the subsectors of rural development, involve stakeholders, consider needs voiced by the regions and subregions and coordinate all development actions. In addition, scaling back the role of the State and refocusing it on its core mandates, as well as measures to improve the legal and regulatory environment, should contribute to creating an enabling environment for rural development, including setting up agricultural service centres (CSAs) in each district or *fivondrona*.

16. **Institutions.** MAEP is responsible for designing, implementing and coordinating Malagasy State policy in the area of agriculture, livestock and fishing, as well as land tenure. Its mission is to reduce rural poverty, ensure food security and optimize the use of fish resources. In addition to the divisions of the Ministry itself, the Rural Development Policy Unit (UPDR), although it is attached to the Office of the Minister, is available to the Permanent Steering Committee (EPP) of the Action Plan for Rural Development (PADR) to conduct all studies and missions for policy setting and rural development programming. Agricultural and rural development issues are the responsibility of DIRDR/DRDR and their regional services at the sub-prefecture level. In the area of technical support or assistance, the main regional actors are CIRAGRI and CIREL (regional livestock breeding districts), the National Centre for Applied Research in Rural Development (FOFIFA) and the Technical Horticultural Centre (CTHT) on the eastern coast. The chambers of agriculture now being set up (Tranoben'ny Tantsaha) should over time become privileged professional organizations for all operators in the agricultural sector at the regional and district level (CSA).

17. **Farmers' organizations.** The project regions generally, and Melaky in particular, are characterized by a limited degree of organization among farmers. This occurs for several reasons. First, small farmers are generally located in isolated areas fraught with communication problems. Their

productivity is low and does not facilitate a dynamic farmers' movement. Migration and illiteracy are factors as well. Mayors and town leaders are literate but most villagers are illiterate and unfamiliar with the administrative system. Poor security is an aggravating factor. Generally speaking, farmers' organizations show low maturity levels and lack initiative and operating autonomy.

18. **Rural finance.** Access to credit services is very limited, with less than 3% of producers having access to formal credit and 21% using informal credit. According to the 2000 survey by the Rural Observation Network (ROR), residual unmet demand is very high (43% of rural households have unmet needs). Since the early 1990s, the Government has been implementing a policy to develop decentralized financial systems and mutual financial organizations. The CECAM network of credit unions is present in both regions and is particularly well developed in Menabe in towns (Morondava, Miandrivazo) and along Routes 34 and 35, but faces problems with low levels of agricultural activity and insecurity. Conditions for credit access are, however, difficult for target groups.

#### IV. IFAD ACTIVITIES AND LESSONS LEARNED

19. **IFAD strategy for intervention.** Since 1979, IFAD has contributed financing to nine development projects in Madagascar. Two are currently being implemented and have been for several years: the North East Agricultural Upgrading and Development Project (PADANE) and the Upper Mandraré Development Project (PHBM II). A third project is now being launched: the Rural Revenue Promotion Programme (PPRR), designed to improve and develop market access by small farmers, in particular by creating partnerships with private commercial operators. For many years IFAD and other donors have focused on irrigated rice production, since rice is the major crop and main activity of most poor farmers. Despite their efforts, the impact on growth in the agricultural sector overall and on improving incomes for small farmers has not been proportional to the investments made.

20. Within the framework of its regional strategy for Eastern and Southern Africa, IFAD's new projects are intended to help rural populations lift themselves out of poverty, through the following strategic thrusts (i) promoting efficient and equitable market linkages; (ii) developing financial systems adapted to the rural poor; (iii) improving access to and management of land and water for the rural poor (resource management and conservation as a development outcome); (iv) increasing access to irrigation and improving water management; (v) creating a better knowledge, information and technology system adapted to the rural poor; and (vi) moderating the impact of external or internal shocks such as HIV/AIDS or potential conflicts.

21. **Other development partners.** Coordinated donor support includes, inter alia, contributions from the World Bank, European Union, United Nations Development Programme, African Development Bank (AfDB), United Nations Food and Agriculture Organization, IFAD and the Governments of the United States, the Netherlands, France, Switzerland and Germany. Total development aid for Madagascar is about USD 300 million annually.

22. **Lessons learned from IFAD projects.** These may be summarized as follows:

- (i) special attention must be paid to targeting mechanisms to ensure that projects benefit the most vulnerable groups (landless peasants, women, young people, migrants) within the framework of a participatory approach;
- (ii) ensuring beneficiary participation in project programming, implementation and monitoring and evaluation is crucial to the responsiveness of activities to the priorities of beneficiaries, while taking care to maintain flexibility in the process;
- (iii) projects should focus on a limited number of activities where IFAD adds value relative to other donors, seeking in particular to promote and build in issues relating to gender and the poorest of the poor;

- (iv) building capacity in project management units is essential and can be facilitated by adopting clear strategies and directives for project staff regarding the needs of different stakeholder groups;
- (v) innovative projects involving development actions and institutional support should be supervised and monitored closely from the outset, with increased attention to coordination and monitoring and evaluation.

## V. TARGET GROUPS AND PROJECT AREAS

23. **Target groups.** Target populations are essentially poor populations within the project's territorial area of implementation, whether these be small farmers with little or no land, households with nutritional deficits or women and young people, with the emphasis on farmers' organizations and groups of producers or users working in inland valleys and small watersheds. From the sociocultural and agroeconomic perspective, five major target groups can be distinguished: (i) rural households of landless agricultural wage earners; (ii) rural households dependent upon hillside cropping; (iii) rural households in isolated areas that do not benefit directly from services in communal seats; (iv) rural households dependent upon cattle raising; and (v) rural households dependent upon forest resources.

24. **Project areas.** Based on discussions held and visits to the field, it is proposed that the following territorial areas be selected for implementation:

- (i) – **Menabe Region**: 3 clusters of rural communes:
  - **Belo-Tsiribinha** District: 5 communes of Antsoha, Tsarahotana, Begidro, Berevo and Belinta (40 *fokotany* or FKT, the smallest community unit, and about 30 000 inhabitants), an intercommunal cluster close to forests and protected areas;
  - **Mahabo** District: 5 communes of Ankilizato, Malaimbandy, Ambia, Beronovo and Tsimazava (42 FKT and about 65 000 inhabitants), an intercommunal cluster that could be developed and gradually opened up through access to Routes 34 and 35;
  - **Miandrivazo** District: 4 communes of Ambatolahy, Mananbina, Isalo and Ankotrofotsy (30 FKT and about 40 000 inhabitants), an intercommunal cluster oriented towards various activities (irrigated and flood recession agriculture in particular, tobacco concessions and conservation).
- (ii) – **Melaky Region**: a cluster of 4 communes could be selected in the District of Antsalova around the communes of Masoarivo, Trangahy, Bekopaka and Antsalova (already linked through mayor's associations), with a target population of some 40 000 inhabitants. A subsequent expansion towards other districts could be envisaged during the second phase of the project, if the problems of illiteracy, isolation and insecurity are resolved under the new regional programme, at least in part.

25. **The case of Melaky.** This region, with its low population density (4 to 5 inhabitants/km<sup>2</sup> on average) and chronic food deficit, is faced with three major constraints to development: illiteracy (on the order of 80%; 60% of heads of household are illiterate); a high degree of isolation and deficient rural infrastructure; and serious public safety issues (theft of zebus and crops). The formulation mission, following its field visit, felt that the new IFAD project could not intervene effectively and give the necessary consideration to Melaky's development and economic returns, without having first established a medium to long-term investment programme to remedy the three major constraints mentioned. This in turn requires a firm political will on the part of the Government, as well as the involvement of major donors to provide financing. Nevertheless, in view of the request by the Minister of MAEP and to contribute gradually to a regional recovery to brake the slow decline into pauperization and chaos, the IFAD project could intervene, during a first phase, in the Antsalova District alone (focusing on the three communes located along the Manambolo River, close to Menabe).

This would enable project start-up to occur while minimizing risks in a relatively denser and more disadvantaged area (cf. impact of activities under the Bemahara Project, which is scheduled to close in November 2005 but is expected to be extended until the end of 2007), with a strong focus on rehabilitating roads towards Antsalova to the north and Menabe to the south.

26. **The problem of land security.** Madagascar's population is principally composed of Vazimba, a people who fled the central highlands following domination by the Merina. The Vazimba people lack a solid social organization and were very soon forced to flee once again as the better organized Sakalava people from the south pursued their expansion towards the north and east. Waves of Antandroy migrants from the extreme south, Antanosy from the extreme south-east, ethnic groups from the south-east, Merina from the central area and Betsileo from the mid-south then arrived to join the population in the western region. This entire region of the country has traditionally been divided into grazing lands, the boundaries and owners of which are known to each community. Accordingly, it is very difficult to obtain access to land that lends itself to development. Authorization must be obtained from the owner to avoid conflict. Large landholders have considerable power in these grazing lands. This is one of the types of land occupation that is recognized by local populations under customary law. In order to clear land, those newly arrived in the area must seek an agreement with the local population, above all with the *olo-be* (council of wise men or notables).

27. The indirect (non-owner) farming approach is observed only in the rice-growing areas of the inland valleys and in flood recession cropping areas. For rain-fed cropping in watersheds or on plains, non-owner farmers can request permission to farm free of charge by accepting property lineage. However, this is merely a loan, until such time as the farmer is accepted as a decision-maker within the village. Leasing exists but is less frequent. Owners prefer this type of indirect farming because they know in advance how much is expected, but not many farmers can risk making use of this system. Sharecropping, however, is very frequent, particularly in areas with high population density (irrigated perimeters). For grazing lands, neither leasing nor sharecropping are options, much less sale. These areas are managed and used by property lineage or lent out temporarily. The desire to be recognized as an owner, without going so far as to obtain title, is seen above all in inland valleys and alluvial land (*baiboho*). It is seen mainly among migrants who have managed to gain access to land (by clearing or purchase) as well as rice-growing plots where irrigation is available.

## VI. PROJECT DESCRIPTION

### A. Project rationale

28. Secure access to land and guaranteed land rights are critical factors in rural poverty reduction, particularly with respect to vulnerable groups (women, young people, migrants). The current land tenure system and types of land use (e.g. sharecropping) do not provide poor populations with sustainable access to land, particularly irrigated perimeters. Disadvantaged groups such as women and young people are in most cases subjected to discriminatory treatment and reduced to the status of farm workers employed by owner farmers. This has an impact on productivity, including irrigated production, and does not encourage farmers to invest in or maintain equipment. Poor populations moving into watersheds out of necessity are not motivated to develop erosion control techniques to preserve the environment and natural resources.

29. The new IFAD project will be based on a participatory approach to promote autonomy among the rural poor, sustained by local development efforts and involving the poor in programming and managing their own development. It will be important to ensure that the project support is targeted and directed at overcoming obstacles to mainstreaming marginalized populations into the development process – mainly those moving into watersheds out of necessity and requiring support for rain-fed farming and training as well as a new working relationship between the sexes where necessary. The option for this project is therefore to take an approach that combines irrigated agriculture (small perimeters and inland valleys) and rain-fed agriculture (watersheds and hillside slopes) in vulnerable areas, with a view to achieving land security (adapted to local systems of production and social

organization) and productive development (including rain-fed rice and diversification towards other profitable crops), taking into account measures for environmental protection.

## **B. Project approach**

30. The project will be built around the following strategic thrusts:

- (i) the link between the two components of land tenure security and productive optimization (mainly in terms of land access and use by disadvantaged populations such as migrants and management of communal land based on representative farming systems) is considered essential;
- (ii) a regional perspective (complemented by institution-building to be implemented nationally under the National Land Use Management Plan – PNF) appears consistent and justified in terms of action, within the regional development approach stipulated in the law of 11 June 2004;
- (iii) the project interventions are organized in a decentralized manner (identifying “clusters” of rural communes where the project will be implemented), encouraging demand for intercommunal action;
- (iv) the concept of intervention is expanded to encompass the entire rural environment in the areas selected, under a participatory approach that takes into account the needs and aspirations of poor and vulnerable rural populations with respect to land access and sustainable productive development (in particular, those of vulnerable populations moving towards hillside slopes and lacking access to land, such as women, young people and migrants);
- (v) the project takes into account the guidelines set in the framework of decentralized land use management under the PNF (social diagnostic assessments of land tenure and communal administration offices, consideration for defining types of land use where the farmer is not the owner) and the reorganization of agricultural services (around the notion of district CSAs);
- (vi) flexibility in carrying out project activities is assured in terms of the intervention themes (adaptation driven by grass-roots demand) and territorial implementation areas (phased project implementation).

## **C. Project objectives**

31. ***Development objective:***

– Reduce rural poverty by raising incomes and improving the capacity of grass-roots communities and groups to take charge of their own development (around three thrusts: increase and secure the incomes of producers affected by climate events, preserve natural resources in vulnerable ecological areas and secure investments, support farmers’ organizations to enable them to carry out development actions).

32. ***Overall project objective:***

– Improve access by the rural poor to, and management of, land (land security) and water (optimization of production and development of inland valleys and small watersheds) to secure the incomes of small producers and improve their productive base on a sustainable basis, while limiting the rural exodus towards urban centres.



33. *Specific objectives:*

1 – Support for (i) policy, processes and measures or mechanisms promoting land security and land use rights, both nationally (PNF) and in the territorial areas of project implementation, within a context of decentralized land use management that takes into account both owner farming and indirect (non-owner) farming; and (ii) reform and implementation of the institutional and regulatory framework for land security to underpin a sustainable development of farming systems and protection for natural resources.

2 – Sustainable development of the productive base through support for the conservation and management of inland valleys and small watersheds, application of erosion control and conservation techniques and sustainable management of soil fertility and adapted use of organic enrichments and inputs, building capacity among beneficiaries through training and the provision of technical and financial services adapted to the needs of the rural populations concerned.

**D. Description of project components**

34. Project duration will be eight years (two phases of four years each). The project will intervene in a total of 21 regional communities (CRs) in the two development regions (GTDRs) of Menabe and Melaky (population of some 200 000), distributed among five clusters of communes with coverage of 177 FKT and a coverage rate of 40% of the population (80 000 direct beneficiaries). The project will be implemented gradually during the first four-year phase in 12 CRs, later to be expanded to nine additional communes during the second phase (with two communes to be determined in Melaky). Within a single CR, all FKTs are expected to be reached within two years (some 50% per year). During this first phase, the various components will be introduced, farmers' organizations set up and awareness-raising activities carried out. The second four-year phase will serve to consolidate the results of the first phase and to support and extend long-term actions (agricultural diversification and intensification, technical advisory assistance, agro-forestry, etc.). Year one of the project will essentially be a start-up year, with information and communication campaigns, communal land diagnostic assessments and start-up studies to raise awareness among rural populations concerned and commence operations in the two districts identified in the Menabe region (Belo/Tsiribihna and Mahabo).

35. The project is structured around the following three components:

**Component 1** – *Support for land tenure security*. This component is intended to provide support for policy, processes and measures in connection with land tenure security and property rights at the national level (National Land Use Management Plan – PNF, and Land and Property Rights Directorate – DDSF) and in the territorial areas of project implementation, within the framework of decentralized land use management (including owner farming as well as indirect farming), with support for policy design and implementation of the relevant institutional and regulatory framework, promoting the management of inland valleys and small watersheds (hillside slopes).

**Component 2** – *Sustainable development of the productive base*. This component aims to improve the productive base through support for the preservation and management of inland valleys and small watersheds, with particular attention to non-irrigated agriculture, optimizing existing farming systems, and the application of erosion control and conservation techniques and sustainable management of soil fertility through the adapted use of organic enrichments and inputs, and through capacity-building for beneficiaries in the form of training and provision of technical and financial services adapted to the needs of the poor rural populations concerned.

**Component 3** – *Project management and monitoring and evaluation* (creation of a project management unit and four to five technical units in the project districts).

36. **Component 1 (Support for land tenure security)**, with an estimated cost of USD 4.1 million, will include two subcomponents at the national and regional levels, respectively:

- **Subcomponent 1.1. – National support for the PNF and DDSF**: Valued at USD 1.4 million, this subcomponent will operate only during the first four-year project phase, and will include the following five cluster of activities:
  - **Cluster 1.1.1**: Support operational implementation of PNF/DDSDF and the programme’s steering committee (COS), by (i) making available, within the DDSF, two long-term consultants (for four years) responsible for liaison and support for land tenure security activities under IFAD-financed projects; and (ii) making a financial and material contribution to the PNF COS operations.
  - **Cluster 1.1.2**: Organize and hold national meetings or forums on land tenure security to raise awareness among those concerned with respect to the PNF, and identify and overcome any constraints and/or conflicts in this area, through (i) a financial contribution to fund brainstorming workshops; (ii) making available international experts (two person months) to contribute to this exercise; and (iii) making available specialized national moderators (eight person months).
  - **Cluster 1.1.3**: Contribute to setting up a land tenure observation office by means of: (i) technical and financial support for land administration offices in the regions concerned to collect data, conserve records, and put in place an archiving system, upgrading existing databases; and (ii) technical support for research into methods for upgrading national and regional databases.
  - **Cluster 1.1.4**: Contribute to updating land tenure regulation and designing a national policy on decentralized land use management, through the regulatory framework for rural development at the national level (in accordance with the orientations of PADR, PNF, the property ownership policy statement and draft legislation on land use), through (i) participation by the new project in processes of reflection under way and support for mechanisms and instruments to secure sustainable land access for rural populations (three person months of international experts); and (ii) capitalizing on the new project’s experience to design a regulatory framework for rural development.
  - **Cluster 1.1.5**: Capacity-building and training for land office staff at the level of the Property and Land Services Directorate (DDSDF), regional offices and responsible officers in decentralized territorial collectivities (autonomous provinces, regions, communes), through (i) a financial contribution to set up capacity-building sessions for land office staff (central and regional) and responsible officers in decentralized territorial collectivities; and (ii) making available consultants specializing in land use information systems, in relevant hardware and software, in decentralized land use management, and in monitoring and management of communal land administration offices (32 three-day training modules).
- **Subcomponent 1.2. – Regional support** (in the two territorial regions for project implementation): on the order of USD 2.7 million, this subcomponent will operate during both project phases (eight years) and will include the following five parts:
  - **Cluster 1.2.1**: For each of the 21 rural communes, draw up a communal land use status report and a community land use plan (PLOF) and development plan (including the current situation and potential for development), by: (i) recruiting operators specializing in GPS and land use management, to support the communes; (ii) acquiring satellite images or orthophotos of the communes concerned (USD 20 000 per commune); (iii) information and awareness raising for beneficiaries and

establishment of local property title committees (CR and FKT level); (iv) determination of land use, preparation of communal land use status reports and validation of communal land use and development plans.

- Cluster 1.2.2: Hold awareness raising sessions and land use workshops at the FKT and CR level, involving: (i) recruitment of operators specializing in organizing and facilitating brainstorming workshops and having in-depth knowledge of land use and communal land management (114 workshops in total); (ii) contributing to CRL operations through reflection at CR level on land use and communal land management; (iii) updating land use status and diagnostic reports and PLOF.
- Cluster 1.2.3: Set up and equip 10 “guichet fonciers” (communal/intercommunal land administration offices) (one in year 1, two in years 2, 3 and 4, and three in year 5), involving: (i) supply of computers, mapping and office equipment (USD 20 000 each); and (ii) land donations (transfer to communes of State land) estimated at USD 50 000 per commune (unit).
- Cluster 1.2.4: Support for operations of 10 “guichet fonciers” for the first two years, in the form of (i) recruitment of operators specializing in decentralized land use as well as support and equipment (premises, staff, setting up operating and management systems); and (ii) technical support for operations of 10 “guichets” through regional land offices and experts (surveyors).
- Cluster 1.2.5: Training and actions in support of communal land use: (i) initial training of communal and intercommunal staff of “guichets fonciers” by trainers specializing in rural land use management and office management, decentralized land use, and land use management information systems; (ii) recycling and monitoring of training provided by operators specializing in decentralized land use management (46 three-day training modules); and (iii) one-off support by international experts in development and rural communal land use management (five person months).

37. **Component 2 (*Sustainable development of the productive base*)**. At a total estimated cost of USD 7.5 million, this component (see Appendix DdT 3) includes three subcomponents:

- **Subcomponent 2.1. – Development and protection of natural resources** (USD 2 801 million), with three cluster of activities:

- Cluster 2.1.1: Build and maintain agricultural roads, limited to direct access to FKTs towards cropping areas for transporting produce. The programme will provide an average of 4 km per FKT, or 650 km in all. This activity is intended to improve access to farms to bring in inputs (by cart) and to take out produce (by cart or light truck). Also included is development of alternative intermediary transportation by light vehicles to carry small quantities of produce, most often powered by human or animal power but also motorized such as cultivators equipped with trailers, or other variants adapted to local conditions and easily maintained. The project will contribute on an experimental basis to demonstrating and popularizing these means of transport.
- Cluster 2.1.2: Develop small watersheds using irrigation and well equipment. This includes small units to be developed around fertile areas and water resources currently not used for irrigation (or used only intermittently for cattle pasturage), on the order of 10 ha and several multiples thereof, to be developed at least cost and with contributions from beneficiary populations. Also included is the upgrading of some existing small perimeters whose viability is compromised by silting and other problems, also with contributions from beneficiary populations. Drinking water well equipment will be provided for four rural communes in the Antsalova district.

Currently people in this area use water from rice paddies for their daily needs and farmers are not using inputs on crops in order to protect water quality. Crop yields cannot increase under these conditions.

- Cluster 2.1.3: Develop watersheds and hillside slopes for adapted farming while protecting natural resources: agro-ecological crops, direct sowing under plant cover, pasturage, agro-forestry, reforestation, erosion control techniques (contour cropping, vetiver hedges, etc.) will replace current practices. These methods, properly used and mastered, will bring substantial revenues to farmers and will help protect soil resources.

38. Additional rural infrastructure will be needed to build rural roads, bridges, communal buildings (schools, clinics), repair and rehabilitate large or medium-sized irrigated perimeters, provide water and sanitation, and other equipment and services. These programmes will be coordinated with other donors under programmes such as the European Union's ACORDS, the World Bank's Community Development FID programmes, and generally within the context of communal development plans and donor cooperation agreements.

- **Subcomponent 2.2. – Optimizing production** (USD 2 246 million), comprising three activities:

- Cluster 2.2.1: Diversification and productive investment. Several activities will be carried out in addition to traditional ventures: small-scale livestock workshops, market gardening and beekeeping, in particular for the smallest producers and for landless peasants, as well as rational development and intensification to generate additional income. Diversification will target small-scale processing of fruit and vegetables, by promoting existing appropriate technologies for small producers and research and development on small-scale processing at the village level (fruit juice, jam, dried fruit, preserves, etc.) and small husking and animal feed production units.
- Cluster 2.2.2: Intensification of operations. The main objective is to increase food crop yields (it is considered feasible to achieve 3.5 T/ha of rice paddy by applying improved crop techniques) and intensify other crops (improved varieties and seed renewal). In addition to crop intensification, plans should include the use of natural pesticides based on local plant extracts, offering the triple advantage of avoiding the purchase of expensive chemical pesticides, compatibility with organic agriculture, and promoting local products. In addition, livestock raising will be intensified (watering holes provided in dry season for cattle, animal health, feeding). This part includes proximity provisioning (inputs and small farm equipment), nurseries, livestock support, and demonstration aids.
- Cluster 2.2.3: Research and development. This part will be applied to ventures and problems in the project area to enable adapted techniques and technologies to be developed for cropping, irrigation, small-scale processing and erosion control.

- **Subcomponent 2.3 – Capacity-building for farmers' organizations and technical assistance providers** (USD 2 462 million), with three parts:

- Cluster 2.3.1: Support for territorial collectivities. The main aim is to provide collectivities with support in land diagnostics, studies, and management and development models. The project will contribute in this way to strategic planning, management models, action plans and investment strategy. Support will be provided for identifying opportunities for development, technical innovation (e.g. agro-ecological) and analysis (information systems, decision-making aids, management of

pasture and other resources). The project will also contribute to providing information and instruments (technical documentation, mapping instruments).

- Cluster 2.3.2: Support for farmers’ organizations and service providers. Technical support for producers will be based on establishing an agricultural council through a partner NGO, with trainers and a programme adapted to the needs of target groups (technical skill levels, ventures, etc.). They will carry out a dual role, disseminating technical information for agricultural intensification and helping project beneficiaries to organize workshops and obtain technical training. The programme will also include specific training for the farmers who are to take over training after the project’s end. NGO providers will also benefit from capacity-building programmes for their staff, in particular agricultural advisors in technical areas and teaching adapted to a farming context. Support will also be provided for the design and production of technical data sheets and teaching materials.
- Cluster 2.3.3: Microcredit: Studies (on markets, potential clientele, product demand, products to be developed based on production orientation, such as microprojects in diversification), village outreach to inform and raise awareness among producers concerning microcredit and opportunities for financing medium- and long-term projects (plantations, small-scale farming equipment, productive investments, etc.), lending procedures and support for start-up of 10 local credit unions.

39. **Component 3 (*Project management and monitoring and evaluation*)**: This component, with an estimated value of USD 2 960 million, includes activities and resources to operate the project over the entire eight-year period, specifically by setting up a project management unit (PMU) and four district-level technical units (and possibly a fifth at Melaky during the second phase). It comprises two subcomponents:

- **Subcomponent 3.1: Investment** (USD 1 817 million), with four clusters:
  - Cluster 3.1.1: Information and communication (start-up campaign and workshop, outreach in 21 rural communes, annual information campaign).
  - Cluster 3.1.2: Technical assistance, training and audit (studies, 18 person months of national consultations, monitoring and evaluation, interim review, validation workshop, training and audit ).
  - Cluster 3.1.3: Technical staff of PMU (one coordinator, one administrative and financial officer, one monitoring and evaluation and communication officer and two technicians for each of five district units).
  - Cluster 3.1.4: Four-wheel drive vehicles (4), motorcycles (16), office equipment (12) and fax/radios (6) for communication and data transmission.
- **Subcomponent 3.2: Operation** (USD 1 143 million), with 3 clusters:
  - Cluster 3.2.1: Administrative staff of PMU (one liaison officer to work with IFAD Project Support Office within MAEP (BAP-FIDA) located at Antananarivo).
  - Cluster 3.2.: PMU operating costs
  - Cluster 3.3.3: Operation of project structures and institutions (decentralized committees - CNP, CRO, DDSF and services, land tenure platform).

40. The high cost of this Component 3 for project management is justified by: (i) the innovative nature of the project, so that significant technical assistance is required; (ii) the scope of project intervention in two relatively isolated regions and the consequent need for project team mobility; and (iii) the decentralized nature and proximity of the technical team providing project support at the four or five district-level units and 21 rural communes.

## VII. PROJECT COSTS AND FINANCING

41. The project's base cost is estimated at USD 14 555 million overall, or FMG 139 billion or 27.8 billion Ariary (net of Government contribution, taxes and contingencies), and breaks down as follows (figures have been rounded):

- Component 1: USD 4.1 million (of which USD 1.4 for national support for PNF and support for the policy and regulatory framework, and USD 2.7 for territorial implementation in the 21 project communes).
- Component 2: USD 7.5 million (of which USD 2.8 for support for natural resource management and protection; USD 2.2 for productive development; and USD 2.5 for capacity-building and technical advisory assistance).
- Component 3: USD 3.0 million for project management, coordination and monitoring and evaluation.

The total project cost (including the Government contribution, taxes and contingencies) is USD 15 284 million, of which: USD 14 066 million from IFAD (92%); USD 0.710 million, or 4.6%, to be contributed by the Government (covering taxes and levies); and USD 0.508 million to be contributed by beneficiaries (3,3%).

42. Total base costs by component are as follows:

### Total Base Costs (Net of Taxes and Contingencies)

Component	Subcomponent	USD Million		%
<b>Component 1:</b>				
Support for land tenure security	Operational implementation of PNF Land tenure security in project areas	1.401 2.681	4.082	28.1%
<b>Component 2:</b>				
Sustainable development of the productive base	Development and protection Optimization of production Capacity-building and technical advisory assistance	2.801 2.250 2.462	7.513	51.6%
<b>Component 3:</b>				
Project management and monitoring and evaluation	Project management, coordination and monitoring and evaluation	2.960	2.960	20.3%
<b>Total</b>			<b>14.555</b>	<b>100%</b>

43. IFAD will contribute approximately USD 14.1 (FMG 134 billion or 26.8 billion Ariary, or about 92% of total cost). The contribution to be made by the Malagasy Government is estimated at USD 0.7 million (FMG 6.7 billion or 1.33 billion Ariary, or 4.6 % of total cost) in respect of taxes and

levies. To be discussed with the Government is the defraying of 10% of PMU operating costs (vehicle running costs, office expenses and other operating expense). The beneficiaries are to contribute about USD 0.5 million (FMG 4.750 billion or 0.950 billion Ariary), equivalent to 15% in diversification miniprojects. Contributions of labour by farmers could also be contemplated in connection with maintenance for agricultural tracks and small-scale works. Finally, local collectivities (rural communes and FKT) should be able gradually to finance part of maintenance costs for the 10 land administration offices (beginning in year three).

44. At the time of project evaluation, cofinancing possibilities should be examined with partners, such as the Millennium Challenge Account (MCA) and International Land Coalition (ILC) with respect to land; the World Bank for project and equipment financing (under the PSDR and FID-IV projects); and the European Union for local development and communal/intercommunal investment financing (under the ACORDS programme).

## VIII. ORGANIZATION AND MANAGEMENT

45. **The main project agency** will be MAEP, with the project operating in a context of deconcentrated and decentralized management in line with the direction of the institutional reform under way in rural development and food security in Madagascar. A **National Steering Committee** (CNP) will be set up at the programme's outset when the PMU is set up. The committee's role will be to ensure programme compliance with national and sector policy and with the Public Investment Programme (PIP), and to ensure project coordination with other national programmes. The committee will be chaired by the Chair of the Permanent Steering Team (EPP) of PADR, the frame of reference for rural development. One or two **Regional Steering Committees** (CROs) will be set up, one at Morondava (for Menabe) upon start-up of the project and its management unit and the other at Maintirano (for Melaky) in phase two, should the project be expanded to that region. Their role will be to ensure, in their respective regions, project compliance with general development directions in the region as well as internal consistency among the various components and with various partners and areas of action; as well as consultation and consensus-building among the strategic partners, NGOs, operators and providers.

46. Management of project operations will take place through a **Project Management Unit** (PMU) based in Morondava. The PMU will be responsible for overall operations and for the project's technical and administrative management. Technical activities will be coordinated by **District Technical Units** (ATDs), each comprising a team of two technicians (one agroeconomist and one local development specialist). During phase one of the project, four district units will be set up for Menabe in the Districts of Belo/Tsiribihna and Mahabo (in year one) and Miandrivazo (in year three) and for Melaky in the District of Antsalova (in the course of year two). For this region, the possibility of setting up a fifth unit will be decided on during phase two of the project (in year five), based on the results of operations during phase one and possibilities for expansion following investments to open up the project area and initiate economic recovery by national and regional authorities with donor support. The role of technicians in the district units will be to coordinate and supervise activities in support of the project at the commune level by service providers.

47. The project will be implemented under a participatory approach whereby all interventions will be responsive to demand from the field. Support, advisory assistance and implementation will be outsourced to service providers, NGOs and competent enterprises. The PMU's role will be confined to coordination and monitoring. Technical and financial partnership agreements will be reached with the partners concerned, in accordance with IFAD's customary rules and procedures. To ensure sound implementation, the PMU will participate in establishing a consultative body at the beginning of year one (expanded land tenure platform) to open discussions up to all partners and orient the project on a concerted basis, creating crucial links with NGOs as well as technical and economic operators.

## IX. BENEFITS, JUSTIFICATION AND RISKS

48. **Impact on poverty reduction.** Benefits will accrue in three areas: (i) improving land security on a sustainable and proximity basis; (ii) developing inland valleys and small watersheds under an environmental protection perspective; (iii) raising productivity and diversifying activities and revenues. Other benefits are anticipated from the development of adapted proximity financial services in the intervention area, capacity-building for the rural populations concerned and improvements in their living conditions. Benefits from the strict perspective of property ownership are more difficult to quantify. At the project's end, half the total target population (close to 40 000 households) will have improved their land security (or gained sustainable access to land) through recognition of their property rights (title of ownership or use, existence of a lease or multiyear operating agreement) and establishment of 10 communal/intercommunal land administration offices (covering an estimated 5 000 ha of land).

49. Direct beneficiaries will include some 15 000 to 16 000 producers directly involved in diversification, intensification and technical support, or more than 40% of all rural households. The project will also provide indirect benefits to all rural households under the various subactivities, as well as land security and optimization actions. Project impact on areas under development and production is shown below. Areas under cultivation will increase from 35 000 ha to 45 000 ha (up 34%), mainly for foodstuffs. Production will increase from 68 000 tons to 165 000 tons, including 163 000 tons of foodstuffs, which will improve the population's nutritional status considerably. The availability of foodstuffs will increase from an average of 5 kg per day per family (the current situation) to 12 kg per day per family with the project.

50. The project's economic internal rate of return has been calculated on the basis of two hypotheses:

1/ – taking into account all project costs (three components: USD 14.6 million): EIRR estimated at 5%, which is low but explainable since component 1 for land tenure security support (with an estimated cost of USD 4.1 million) involves institutional support whose impact is difficult to evaluate in economic terms for the beneficiaries concerned.

2/ – taking into account the cost of components 2 and 3 only (USD10,5 million): EIRR can be estimated at about 12% and better demonstrates the project's economic impact on improving the living conditions and incomes of the rural poor populations concerned.

A sensitivity analysis shows that the project is sensitive to variations of 10% in costs and benefits.

51. **Innovations.** IFAD is well positioned to innovate in the area of land security, thereby contributing to an in-depth reflection on land tenure systems needed by small producers and the rural poor, as well as the design of an appropriate land use management system and sustainable appropriation mechanisms. In the context of formulating the new project in western Madagascar, several sociological diagnostic studies of land tenure have been undertaken (under the IFAD grant for USD 170 000 granted to DDSF in support of the PNF procedure) with a view to identifying the major constraints and causes of land disputes and the land tenure systems to which small producers and the rural poor aspire in the four rural communes located in the two regions of Menabe (around Morondava) and Melaky (around Maintirano) to the west. Nevertheless, these diagnostic studies must be followed by a more in-depth evaluation to assist the rural poor and small producers to express their needs, to mark the beginning of the pilot phase to establish appropriate systems of land use management.

52. **Environmental impact.** Measures to protect natural resources, including specific treatment for hillside slopes, will have a positive impact. The adverse effects of agricultural intensification that could result from the use of inputs such as fertilizers and pesticides will be limited given the marginal quantities involved. Moreover, the project will encourage the use of organic fertilizers and natural pesticides based on local plant extracts. Pursuant to Environment Ministry (MECIE) Decree No. 99.954 of 15 December 1999 reconciling investment with environmental considerations, an



environmental impact assessment (EIA) should be carried out prior to project implementation and submitted to the National Office of the Environment (ONE).

53. **Risks.** The project's sustainability and viability are contingent upon the political will of the Government and donors to support land reform and secure property rights, particularly in poor and marginalized rural areas. The instruments and support provided (under the IFAD grant in particular) for the entire project duration (eight years) raises the expectation that the objectives set will effectively be achieved to benefit the populations concerned. The problems specific to the Melaky region (isolation, illiteracy, inadequate public safety) must be taken into account prudently to ensure the project's success and, as indicated, should be addressed through firm development action by national and regional authorities, particularly during phase one.

54. Major risks are: (i) problems with implementing the PNF approach and its acceptance by land services technicians as well as beneficiary users; (ii) insufficient donor commitment to ensure consistent, complementary interventions; (iii) failure of producers and farmers' organizations to take ownership of the development approach and sustainable watershed development involving intensive production and environmental protection; (iv) insufficient capacity on the part of project partners to carry out their assigned responsibilities; and (v) the possibility that the most vulnerable may be excluded from the project benefits. In addition, the prevailing situation of insecurity in the project's territorial areas of application, together with weaknesses in the institutions and human resources in MAEP deconcentrated services and local collectivities could jeopardize the implementation of project activities and achievement of the objectives set with respect to poor and marginalized rural populations. A proper evaluation of all such risks should be carried out during the next mission to finalize IFAD identification in October 2004.

55. **Conditionality for project implementation.** The lack of security (*dahalo*) is felt by populations and local partners to be a serious threat to the implementation of any future interventions in the Menabe region (see Appendix DdT 5). In many areas, assaults and thefts of zebus continue to rise and keep farmers and public officials such as teachers from leaving the villages. Countermeasures taken to date have not been successful. The mission recommends that firm commitments to improve security (e.g., by establishing police checkpoints) be made by the Government before the project commences at the end of 2006, and that actions be taken such that the project may be evaluated and its implementation planned, in particular in the two regions proposed.

56. In order to expand the project to Melaky during the second phase, the investments for regional economic recovery will have had to be undertaken successfully. In addition, the rehabilitation of road infrastructure by AfDB and the African Development Fund (Routes 34 and 35 in Menabe) and by a Chinese company and the Bemahara Project (in Melaky), as well as the commencement of communal and intercommunal rural infrastructure operations (EU ACORDS Programme) and land operations (MCA) are important conditions for improving the regional environment to facilitate a concerted and adapted commencement of the new IFAD project in late 2006. Overall, concerted action and coordination of interventions by the various donors are considered crucial for harmonious project implementation and success.