

a

IFAD

INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT

Executive Board – Eighty-Second Session

Rome, 8-9 September 2004

REPORT AND RECOMMENDATION OF THE PRESIDENT

TO THE EXECUTIVE BOARD ON A PROPOSED

TECHNICAL ASSISTANCE GRANT

THROUGH THE

UNITED NATIONS OFFICE FOR PROJECT SERVICES

FOR THE

REGIONAL PROGRAMME

IN SUPPORT OF A

**MEDICINAL PLANTS DEVELOPMENT NETWORK
IN ARGENTINA, BRAZIL, PARAGUAY AND URUGUAY**

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS	ii
I. BACKGROUND	1
II. RATIONALE/RELEVANCE TO IFAD	1
III. THE PROPOSED PROGRAMME	2
IV. EXPECTED OUTPUTS/EXPECTED BENEFITS	3
V. IMPLEMENTATION ARRANGEMENTS	4
VI. INDICATIVE PROGRAMME COSTS AND FINANCING	4
VII. RECOMMENDATION	5
 Appendixes	
I. Organizational Chart	1
II. Logframe: Regional Medicinal Plants Development Network – MERCOSUR	2
III. Participation by Small Producers of Medicinal Plants in the Programme and its Benefits	4
IV. Implementation Arrangements	5

ABBREVIATIONS AND ACRONYMS

MDA	Ministry of Agrarian Development
MERCOSUR	Southern Cone Common Market
ROCU	Regional Operative Coordination Unit
RSC	Regional Steering Committee
TAG	Technical Assistance Grant
UNOPS	United Nations Office for Project Services

**REPORT AND RECOMMENDATION OF THE PRESIDENT OF IFAD TO
THE EXECUTIVE BOARD ON A PROPOSED TECHNICAL ASSISTANCE GRANT
THROUGH THE UNITED NATIONS OFFICE FOR PROJECT SERVICES
FOR THE REGIONAL PROGRAMME IN SUPPORT OF A
MEDICINAL PLANTS DEVELOPMENT NETWORK
IN ARGENTINA, BRAZIL, PARAGUAY AND URUGUAY**

I submit the following Report and Recommendation on a proposed technical assistance grant (TAG) to be administered by the United Nations Office for Project Services (UNOPS) for the Regional Programme in Support of a Medicinal Plants Development Network in Argentina, Brazil, Paraguay and Uruguay, in the amount of USD 1.0 million for a three-year period.

I. BACKGROUND

1. There is a large and dynamic market worldwide for herbal medicines, and identified sizeable market segments at the local, national and regional levels. There is also significant production of medicinal plants in the Latin America and the Caribbean region, and good potential for their processing into herbal medicines. In this context, in the four countries of the Southern Cone Common Market (MERCOSUR), Argentina, Brazil, Paraguay and Uruguay, the production diversification of the smallholder sector is seen as a strategic objective to improve the incomes and welfare of small farmers.

2. Fostering the cultivation of medicinal plants, based on ecological farming practices and sustainable natural resource management, is considered to be a promising option for rural poverty reduction in the region. For example, the Ministry of Agrarian Development (MDA) of Brazil is designing integrated development policies in support of medicinal plant development and investing in the construction of a laboratory in the State of Rio Grande do Sul. This initiative builds on innovative experiences in the state related to herbal medicine production with direct supervision and quality control by the public health system. In the same vein, during the last meeting of its Science and Technology Network, representatives of MERCOSUR reached an agreement to present a programme proposal to IFAD regarding the establishment of a regional medicinal plants development network. This was the successful conclusion of a process that started with preliminary contacts between the Science and Technology Secretariat of Rio Grande do Sul and IFAD and its expansion, supported by the FIDAMERCOSUR programme,¹ to Brazil and other MERCOSUR countries.

II. RATIONALE/RELEVANCE TO IFAD

3. The proposed programme addresses rural poverty reduction through sustainable rural development strategies for IFAD's target groups in the Southern Cone countries and the search for viable and expanding economic opportunities to improve the incomes of the rural poor. The programme is also framed within: (i) IFAD's strategy by contributing to one of its key objectives, i.e. providing the rural poor with better access to technologies and markets; and (ii) the regional strategy for Latin America and the Caribbean, by opening up new markets for the rural poor and incorporating them into value-added chains, through the systematic integration of agricultural production and industrial processing of medicinal plants, under standardized production methods.

¹ Institutional and policy support programme to reduce rural poverty in the MERCOSUR area.

4. The programme is consistent with the Fund's TAG policies and approach, since: (i) it aims to establish a regional network for research and innovation in agricultural production and processing technology for medicinal plants in the four countries in question; and (ii) its approach seeks to involve both researchers and organized small poor farmers. Public health and biodiversity conservation are other key dimensions of the proposed programme. The expanded production of herbal medicines will contribute to building a public health system with guaranteed access to a variety of therapies, as herbal medicine represents a point of intersection between scientific and traditional knowledge of medicinal plants. Accordingly, the main programme responsibilities will be assumed by public sector institutions, while organizations or institutions from the private sector and civil society that: (i) are associated with small farmers' groups; and (ii) have demonstrable working experience with medicinal plants, will be eligible to present project proposals for financing under the programme.

III. THE PROPOSED PROGRAMME

5. The programme's overall goal is to assist small farmers in overcoming poverty by diversifying and increasing their incomes through expanded production of medicinal plants and their processing into herbal medicine. Its primary objective is to support the establishment of a regional network for research and the transfer of technology to small farmers. The network will deal with the cultivation and processing of medicinal plants for the manufacture of medicines. Specific programme objectives are: (i) increasing regional knowledge and awareness of medicinal plants and herbal medicine generally; (ii) promoting the organization of poor small farmers interested in participating – jointly with research institutions – in research and development projects and activities related to medicinal plants and derived medicines; (iii) supporting agricultural research and technology transfer activities relating to medicinal plants that benefit poor small farmers; (iv) supporting chemical and agro-industrial applied research and technology transfer activities regarding plant processing for medicines; (v) promoting joint research projects between two or more member countries; and (vi) establishing and consolidating a regional medicinal plants research and technology transfer network to promote the integration of small farmers into value-added production chains.

Key Programme Activities

6. **Studies.** Studies will be carried out on legal, historical, social, economic, scientific and marketing aspects, and will link the agronomic and therapeutic characteristics of medicinal plants. In particular: (i) market studies will increase knowledge of market opportunities for medicinal plants and herbal medicines at the regional and international level; (ii) socio-economic studies will identify small farmers' groups with potential for the production and processing of medicinal plants; and (iii) legal framework studies will contribute to policy dialogue on the review, updating, formulation and harmonization of the legal framework for the production, processing, commercialization and consumption of herbal medicine in the individual countries of the region.

7. **Basic Agricultural Innovation and Technology Transfer Projects.** The programme will support *Basic Agricultural Innovation and Technology Transfer Projects* that consist of research initiatives in the area of cultivation and post-harvest management and, to a certain extent, involve simple laboratory or industrial processing technology. They will include agricultural experimentation, field tests and validation at the smallholder family farm level, the publication of results and production of written and audiovisual information, and group training. Assistance will be provided to beneficiaries during the cultivation cycle, and during post-harvest management and processing. The maximum timeframe for these projects will be 24 months and the programme will finance up to USD 15 000 per project.

8. **Processing Innovation and Technology Transfer Projects.** These projects will foster the use of medicinal plants for agro-industrial production through adequate research for testing and adjusting production and processing techniques. The projects will be led by research institutions together with organized groups of small farmers. Maximum project duration will be 12 months and the programme

will finance up to USD 30 000 per project. Results will be shared among all involved institutions in the four countries.

9. **Mixed Projects** will be promoted by beneficiary organizations, and will be oriented towards the development of a commercial supply of primary (agricultural) and secondary (agro-industrial) products. They will combine agricultural and processing technology innovations that improve product quality, thereby facilitating the integration of beneficiaries into value-added chains and increasing family income. This will involve research and technology transfer activities at both the agricultural and processing level, tests for product standardization, and quality control of final products. Pilot processing facilities will be provided. For this purpose, contracts will be directly signed between research institutions and small farmers' associations. Priority will be given to joint initiatives involving institutions from more than one country. The maximum project timeframe will be 24 months and the programme will finance up to USD 80 000 per project. Furthermore, the programme will allocate funds in order to establish links with producer organizations to develop the specific legal means to ensure that producers' property rights are respected.

10. **Regional Network.** A Regional Medicinal Plants Development Network in MERCOSUR Countries will be established and consolidated. The programme will carry out specific activities to ensure partnership among the different stakeholders in the four countries. These activities will include the promotion of agreements between research institutions and small farmers' organizations with the ultimate objective of building a sustainable and operational regional network.

IV. EXPECTED OUTPUTS/EXPECTED BENEFITS

11. **Programme Outputs.** At the end of its three-year implementation period, the programme is expected to have the following outputs and results: (i) market studies on medicinal plants and herbal medicines for the entire MERCOSUR region and for each of the four countries involved; specific market studies for selected plants and medicines; four technical country-level studies on legal, historical, traditional pharmacology and scientific aspects related to selected species and their commercial potential; (ii) eight basic agricultural innovation projects implemented (two per country); (iii) eight processing innovation projects implemented (two per country); (iv) at least four mixed projects implemented, each involving at least two countries; (v) consolidation of a regional network for technological and commercial cooperation for medicinal plants and herbal medicines, and the diffusion of project results for expanded application and scaling up; (vi) a regional agreement, supported by the FIDAMERCOSUR programme, for upgrading standardization/certification norms and regulations related to intellectual property rights for processes and products through coordination among authorized academic or research institutions, which takes into account internationally recognized quality patterns; and (vii) following innovative experiences in Brazil, the development of a policy on herbal medicine within the public health system.

12. **Programme Benefits.** The primary beneficiaries of the programme are small-scale producers of medicinal plants. Direct benefits for the rural poor families involved include an effective increase in income, stemming from the transfer and validation of technological processes, production organization and reduction in operational costs, which will incorporate these producers into integrated herbal medicine production chains. The programme will seek to consolidate a regional network of small-scale producers, facilitating their access to technical assistance, creating market channels and reaching agreements with the governments involved in the programme that would ensure production prices at adequate levels. The validation of production steps (botanic selection and certification, post-harvest management and processing, and quality control of vegetal raw material) to guarantee good agricultural and collection practices and the application of quality control methods for medicinal plants are prerequisites for quality herbal medicine production. The benefits of this pilot programme could be extended through the dissemination of successful experiences and results to other small-scale medicinal plant producers in the four countries involved.

V. IMPLEMENTATION ARRANGEMENTS

13. IFAD will establish an agreement with UNOPS to manage IFAD's grant resources and provide administrative support to the programme. Since UNOPS is already administering IFAD loans and supervising IFAD project activities in Brazil, Paraguay and Uruguay, this arrangement will exploit economies of scale and experience in these countries.

14. The organizational and management structure of the programme will consist of a Regional Steering Committee (RSC), four National Committees and a Regional Operative Coordination Unit (ROCU). As a result of the ongoing consultation process at the MERCOSUR level that recognized Brazil's pioneering role in this initiative, it was agreed that programme leadership would be assumed by the Brazilian Ministry of Agrarian Development. Accordingly, a Programme Manager will be proposed by the MDA, and the ROCU will be established in Porto Alegre, State of Rio Grande do Sul, Brazil.

15. **Monitoring and Evaluation and Knowledge Management.** The RSC will be responsible for programme monitoring, and independent entities will be contracted to carry out a mid-term and a final evaluation of programme activities. There will be a technical monitoring of each project financed by the programme, in accordance with specific control mechanisms (process typology, clear description of methods applied and materials) defined by ROCU and an information system will be established, based on data generated by the projects. This will involve scientific and technical personnel from the project and the involved laboratories.

16. Within IFAD, knowledge management links will be established with similar programmes being implemented in the Africa and Asia regions (the Southern African Natural Products Trade Association and the South Asia Organic Production of Underutilized Medicinal, Aromatic and Natural Dye Plants Programme for Sustainable Rural Livelihoods), to take advantage of existing experience in this field. Cross-fertilization activities will be promoted, as will exchanges among the staff of the three regional programmes.

VI. INDICATIVE PROGRAMME COSTS AND FINANCING

17. The total programme cost for the three-year implementation period has been estimated at USD 1 300 000, of which USD 1 000 000 will be financed by an IFAD technical assistance grant, and USD 300 000 by counterpart funds. The programme's required resources have been allocated preliminarily by category as follows.

TABLE OF COSTS IN USD

ACTIVITIES	TAG Funding	Counterpart Funding	Total
Regional Network	150 000	65 000	215 000
Studies	125 000	25 000	150 000
Basic Agricultural Innovation and Technology Transfer Projects	120 000	24 000	144 000
Processing Innovation and Technology Transfer Projects	240 000	48 000	288 000
Mixed Projects	365 000	138 000	503 000
TOTAL	1 000 000	300 000	1 300 000

^a Discrepancies in totals are due to rounding.

VII. RECOMMENDATION

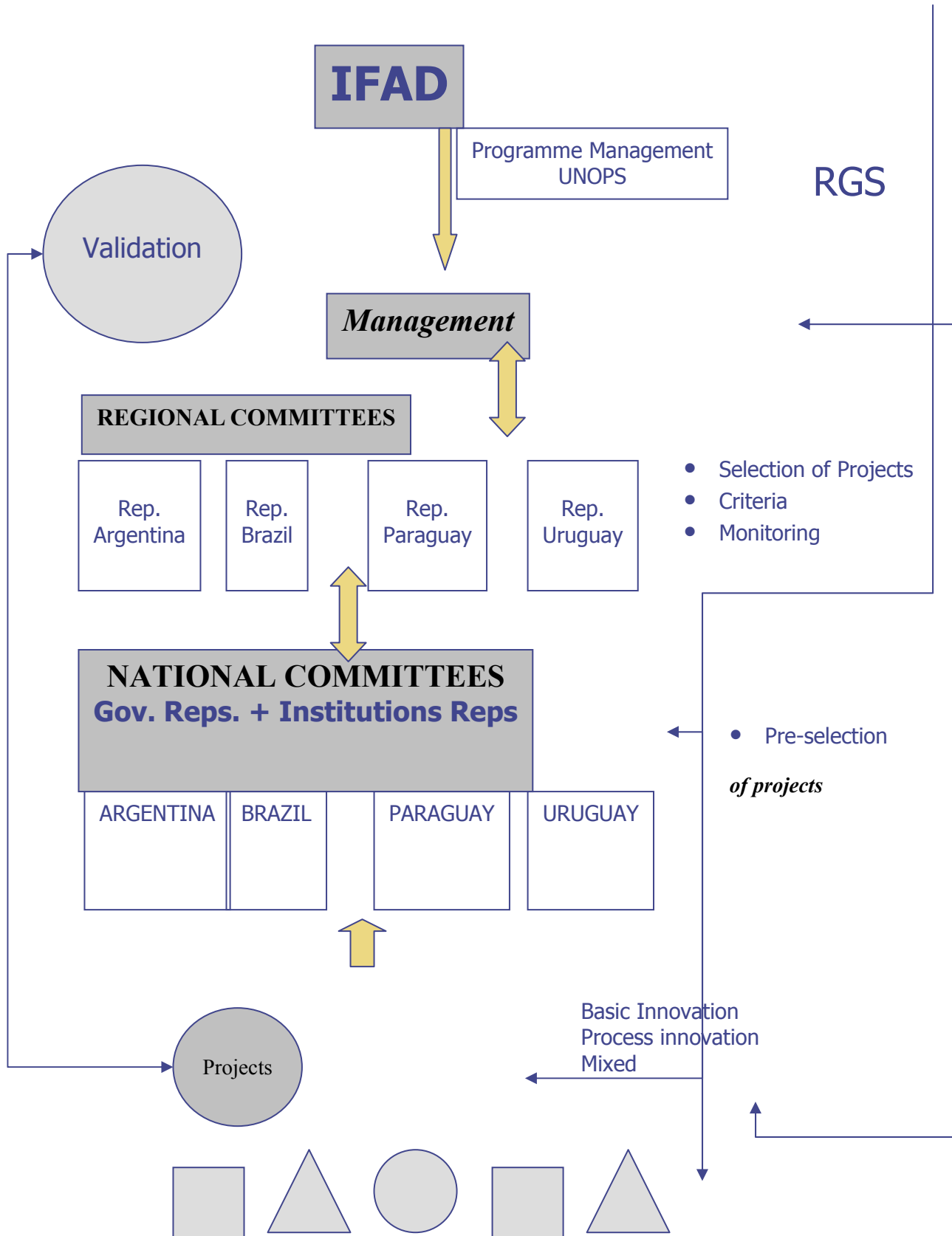
18. I recommend that the Executive Board approve the proposed technical assistance grant in terms of the following resolution:

RESOLVED: that the Fund, in order to finance, in part, the Regional Programme in Support of a Medicinal Plants Development Network in Argentina, Brazil, Paraguay and Uruguay, for three years, commencing in December 2004, shall make a grant not exceeding one million United States dollars (USD 1 000 000) available for the administration of the United Nations Office for Project Services upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

Lennart Båge
President

APPENDIX I

ORGANIZATIONAL CHART



LOGFRAME: REGIONAL MEDICINAL PLANTS DEVELOPMENT NETWORK – MERCOSUR

Objectives	Indicators	Means of Verification	Assumptions and Risks
<p>Overall Goal Small farmers in the region diversify and improve their income through their integration into the value chains of medicinal plants and herbal medicines.</p>	Data on incomes of small farmers who cultivate/add value to medicinal plants.	Statistics and evaluation studies.	.
<p>Purpose Regional research and technology network findings are reaching small farmers involved in cultivation and processing of medicinal plants.</p>	<p>Production of medicinal plants by small farmers' network</p> <p>% of production of small farmers used for producing medicines for human, animal and plant use</p>	Monitoring and Evaluation reports.	Public health systems in MERCOSUR incorporate research findings into therapies based on herbal medicine.
<p>Output 1: Regional knowledge base on medicinal plants and herbal medicines created at the regional level and worldwide.</p>	<p>- One market study on medical plants and herbal medicines for the MERCOSUR region, and one for each country</p> <p>- Specific market studies for selected plants and medicines</p> <p>- four technical studies on legal, historical, traditional pharmacology and scientific aspects</p>	<p>Study reports.</p> <p>Progress reports.</p>	(Value of) local/traditional knowledge is fully recognized and protected in patents, copyrights, and trademarks in favour of small farmers.
<p>Output 2: Organization of poor rural communities and groups of small farmers to participate in joint research projects related to medicinal plants and herbal medicines promoted</p>	Number of small farmer organizations with requisites for research projects formed	Progress report, signed agreements	Development cost/risks are shared with the private sector.
<p>Output 3: Pro-poor innovations and technology transfer activities relating to the therapeutic use of medicinal plants for humans, animals and plants supported in each of the four countries</p>	Eight basic agricultural innovation projects implemented (two per country)	Progress reports.	
<p>Output 4: Joint involvement of research institutes and small farmers associations in research and technology transfer activities related to processing of medicinal plants into herbal medicines facilitated.</p>	Eight processing innovation projects implemented (two per country)	Progress reports	
<p>Output 5: Joint research projects (Mixed Projects) between two or more member countries of MERCOSUR promoted.</p>	Four mixed projects implemented, each of them involving at least two countries)	<p>Progress reports</p> <p>Agreements among institutions from different countries.</p>	

Objectives	Indicators	Means of Verification	Assumptions and Risks
<p>Output 6: A Medicinal Plants Regional Inter-Institutional Public Network for research and technology transfer established and consolidated</p>	<p>Specific legal and institutional arrangements and agreements signed.</p>	<p>Legal documents. Progress reports.</p>	<p>Sustainable funding of initiative secured by profits and proceeds of medicinal herb development</p>
<p>Activities:</p> <ul style="list-style-type: none"> • Identifying rural communities and groups of producers with potential for the production of medicinal plants and herbal medicinal products through appropriate social and economic studies. • Supporting the review, updating, formulation and harmonization of the legal framework for the production, processing, commercialization and consumption of herbal medicines in the region by means of adequate studies and policy dialogue. • Coordinating at the regional level basic research activities related to the development of herbal medicine and promoting exchange of information and scientific knowledge. • Promoting local herbal medicine programmes in order to improve local health standards. • Implementing basic agricultural innovation and technology transfer projects. • Processing innovation and technology transfer projects. • Implementing mixed projects. 			<p>Partnerships with private sector established</p>

APPENDIX III

PARTICIPATION BY SMALL PRODUCERS OF MEDICINAL PLANTS IN THE PROGRAMME AND ITS BENEFITS

1. The overall goal of the programme is to diversify and improve small farmers' income through their integration into the value chains of medicinal plants and herbal medicine. To this end, the programme will (i) identify small-scale producers' groups with potential for the production of medicinal plants and their processing into herbal medicines in areas where IFAD and other partners have previously invested in local development and in activities to strengthen community organizations; and (ii) promote alliances for technical cooperation between these groups and research institutions for the recovery of traditional knowledge and the adoption of new technology for medicinal plant cultivation at the basic agricultural production level, and for plant processing for herbal medicine production.
2. The programme will mainly operate through the financing and implementation of innovation and technology transfer projects, including: (i) basic agricultural production of medicinal plants; and (ii) the processing of medicinal plants. The former will be limited, in terms of cultivated area, to small experimental plots for technology validation. Results will then allow application of these methods to larger areas, involving more producers. The latter may have pre-commercial characteristics and agricultural production costs will be considered as small farmers' counterpart funding. Results will be shared among all involved institutions in the four countries.
3. The programme will also operate through mixed projects involving more than one country and combining basic agricultural and processing innovation. These projects will focus on the adoption of technological innovation at the small-scale producer level, quality improvement of household agricultural or agro-industrial products, and supply contracts for commercial integration of these products.
4. Project proposals will be presented to the programme's National Committees and the Regional Steering Committee for their review and eventual approval. These proposals will involve key stakeholders' associations for the establishment of local models for the development of the medicinal plant/herbal medicine sector, through collaboration by small producers' groups and their representatives with local actors such as academic and research centres, local government, non-governmental organizations, local trade and the private sector. Project selection criteria will include the following: (i) support to the strengthening of household production units to increase income; (ii) use of participative diagnostic, planning, and monitoring methodologies to ensure mobilization of beneficiaries (both men and women) for the project; (iii) community has previous experience with medicinal plants; (iv) establishment of cooperation agreements with research and development institutions; (v) establishment of local partnership agreements with other local actors; and (vi) improvement in basic health care for beneficiaries.
5. Direct benefits to rural poor households stem from the transfer and validation of technological processes, production organization and operation cost reduction, thereby ensuring their integration into herbal medicine production chains. Benefits from this pilot programme could be extended through dissemination of successful experiences and diffusion of results to other small producers of medicinal plants in all four countries.

IMPLEMENTATION ARRANGEMENTS

1. The Regional Steering Committee will be responsible for the: (i) selection, appointment and supervision of the Programme Manager and the approval of the Operation Manual; (ii) review, selection and approval of projects to be financed by the programme; and (iii) the monitoring of programme implementation. The RSC will consist of four members, one representing each of the four participating countries.
2. In each country, the National Committee will be responsible for programme promotion, the identification of potential beneficiaries, the selection of project initiatives to be submitted to the RSC, and monitoring of programme implementation. The NC will comprise representatives of key strategic partners, including representatives of small-scale producers' groups. Chairmanship of the NC will be assumed by a national institution endowed with an organizational structure capable of managing and administering programme activities. The chairperson of each NC will be the country representative in the RSC. The lead institution in Brazil will be the Ministry of Agrarian Development; in Argentina, the Secretariat of Science, Technology and Productive Innovations, Ministry of Education, Science and Technology; in Paraguay, the National Council of Science and Technology, an autonomous entity attached to the Office of the President; and in Uruguay, the National Directorate of Science, Technology and Innovation, Ministry of Education and Culture.
3. The ROCU will be headed by the Programme Manager and comprise key technical and support staff. The Programme Manager will be appointed by the RSC in consultation with IFAD; and will: (i) respond directly to the RSC; (ii) promote programme activities and collaborate in the screening of project proposals; (iii) supervise the implementation and financing of the projects; and (iv) ensure adequate implementation of all technical and administrative aspects of the programme, as well as supervise the preparation of technical and financial reports.