# REPUBLIC OF RWANDA MINISTRY OF AGRICULTURE AND ANIMAL RESOURCES



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# STRATEGIC PLAN FOR AGRICULTURAL TRANSFORMATION IN RWANDA

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# **TABLE OF CONTENTS**

ACCRONYMS AND ABREVIATIONS	iv
EXECUTIVE SUMMARY	
PART ONE: OVERVIEW	
I. GENERAL INTRODUCTION	
1.1. Justification of the Strategic Plan for Agricultural Transformation	
1.2. Methodology	1
II. STRATEGIC AND INSTITUTIONAL FRAMEWORK OF THE SPAT	າ ວ
2.3. Rwanda Experience in Agricultural planning and Development	
2.4. Decentralisation and Community Development Plans	
2.5. Commitment to create new articulations in the development process.	
2.6. The place of SPAT in the national planning system.	
3.1. General Profile	
3.1.1. Overview on the agricultural sector	
3.1.2. Typology and characteristics of agricultural farms	9
3.1.3. Sector institutions	
3.2. Specific characteristics	
3.2.1. Poverty in rural areas	
3.2.2 Food and Nutrition situation	
3.2.3. Land and labour productivity	14
3.2.4. The role of women in agriculture	15
3.2.5. Peasants without land	
3.2.6 The youth and their future in agriculture	
IV. SUB-SECTOR ANALYSIS	
4.1. Natural resources management and water and soil conservation	
4.1.1. Situation of the sub sector of natural resources management	
4.1.2. Constraints	
4.2. Crop production and commodity chains	
4.2.1 Situation of the sub-sector of crop production commodity chains	
4.2.2 Constraints	
4.2.3 Opportunities	
4.3. Animal production and commodity chains.	
4.3.1 Situation of the livestock sub sector	
4.3.2. Constraints in the Livestock Sub-Sector	
4.3.3. Potentialities	
4.4. Farmers Organisations and Service to producers.	23
4.5. Agribusiness, promotion of commodity chains, competitiveness, processing and ac	cess
to markets (agribusiness)	24
4.5.1 Situation in the area of agro-business and promotion of commodity chains	24
4.5.2 Constraints in the area of agro-business and promotion of commodity chains	
4.5.3. Potentialities in the area of agribusiness and promotion of commodity chains	
4.6. Support infrastructure	
4.7. Legal and Regulatory Framework	
4.8. Financing, coordination and monitoring evaluation of the agricultural sector	
V. ANALYSIS OF CONSULTATIONS AT GRASSROOTS LEVEL	
5.1. Objectives, Methodology and general organisation of grassroots of consultations	
<ul> <li>5.1. Objectives, Methodology and general organisation of grassroots of consultations</li> <li>5.2. Constraints and problems raised</li> <li>5.3. Priority commodities.</li> <li>5.4. Priority axes for the transformation of agriculture at local level.</li> <li>5.5. Towards the Implementation of districts agricultural development plans</li> </ul>	
5.3. Priority commodities	
5.0. Priority even for the transformation of agriculture at least level	
5.4. Priority axes for the transformation of agriculture at local level.	
5.5. Towards the Implementation of districts agricultural development plans	
PART TWO: STRATEGIES, PRIORITY PROGRAMMES AND INTERACTION WITH SECTO	
FOR SUPPORT TO AGRICULTURAL DEVELOPMENT	33

i

VI.	<b>STRATEG</b>	IC PLAN FOR AGRICULTURAL TRANSFORMATION (SPAT)	33
<u>6.1</u>		enges	
6.2		on of the Strategic Plan	
6.3		tives of the SPAT	
6.4		ng principles	
<u>6.5</u>	<ol><li>Strate</li></ol>	gic axes	
	<u>6.5.1.</u>	Diversification and intensification of crop, animal and aquatic production	
	<u>6.5.2.</u>	<u>Diversification sources of income and employment for rural populations</u>	
	<u>6.5.3.</u>	Productions between production and the market and integration of agricultural	
		economy in the national and regional economy.	
	<u>6.5.4.</u>	Sustainable management of natural resources particularly water and soils	36
	<u>6.5.5.</u>	Organization; mobilization, strengthening capacities of producers and	
		professional organizations.	36
	<u>6.5.6.</u>	Strengthening capacities in providers of services, privatisation and promotion t	
		private sector.	36
	<u>6.5.7.</u>	Creation of institutional framework conducive for the professionalisation of	
		producers and transformation of Rwandan agriculture.	
	<u>6.5.8.</u>	Creation of conducive environment for productive investment and developmen	
		entrepreneurship and employment in agro-business	
	<u>6.5.9.</u>	Review of the role of MINAGRI and restructuring of its actions through a sector	
		program approach within the decentralization framework.	37
	<u>6.5.10.</u>	Promotion of gender approach and reduction of vulnerability of the	
	55165171	disadvantaged groups.	
		PROGRAMMES AND EXPECTED OUTPUTS	
<u>7.1</u>		sification and development of sustainable production systems	
	<u>7.1.1.</u>	Sustainable management of natural resources and conservation of water	
	740	soils.	
	<u>7.1.2.</u>	Development of integrated livestock systems, agro-sylvo-pastoral production a	na 20
	740	promotion of specialized intensive animal husbandry	
	<u>7.1.3.</u>	Marshland development	
	7.1.4 7.1.5.	<u>Irrigation development</u> . <u>Supply and utilization of agricultural inputs.</u>	
	7.1.5. 7.1.6.		
		Food security, management of risks and of vulnerability.  ort to professionalisation of producers.	42
<u>7.2</u>	<u>. Зиррс</u> <u>7.2.1.</u>	Promotion of farmers organisations and strengthening of producers capacities	
	7.2.1. 7.2.2.	Reform of proximity services to producers and rural innovation	
	7.2.2. 7.2.3	Promotion of Research for Agriculture and Livestock Development	
		Rural financial systems and agriculture credit development	
73		otion of commodity chains horticulture and development of agribusiness	
1.0	7.3.1	Promotion and development of commodity chains and horticulture	
	7.3.2	Transformation and competitiveness of agricultural products	51
	7.3.3.	Rural infrastructures for support to producers	
	7.3.4	Creation of a conducive business environment and enterprise promotion	
7.4		tional development	
	7.4.1	The legal and regulatory framework	
	7.4.2	Reforms and institutional support to public services	
	7.4.3	Coordination and Monitoring and Evaluation of the agricultural sector	
VIII.		UTION OF SUPPORT SECTORS TO AGRICULTURAL DEVELOPMENT	54
8.1	. Gover	rnance and local development	54
8.2	. Enviro	onment, water and land security	54
8.3	<u>Educa</u>	ation and scientific research	
8.4	<u>. Comn</u>	nerce, Industry and handicrafts	
8.5	. Health	n and social protection	56
8.6	<u>Infras</u>	tructure of transport and communication (ICT)	56
8.7	. Finan	cial sector	56
PAR	T THREE:	ACTION PLAN AND INDICATIVE FINANCING PLAN	57

<u> X</u>	LOGIC/	<u>AL FRAMEWORK AND ACTION PLAN</u>	57
9.1	l. Co	ntent of the action plan	57
9.2	2. Imp	olementation modalities	57
	9.2.1	Coherence and articulation challenges	
	9.2.2	Elaboration of operational programmes and investment programmes	60
	9.2.3	Elaboration of sub-sector policies and strategies	60
	9.2.4	Establishment of a mechanism and system for monitoring/evaluation	
	9.2.5	Next steps: Elaboration of MTEF, macro-economic and financial framework	60
	<u>9.2.6.</u>	Search for harmony in multi-stakeholder environment	60
	9.2.7.	Definition of the role of different actors	63
<u>X.</u>	SPAT IN	NDICATIVE FINANCING PLAN	66
<b>BIBL</b>		<u>PHY</u>	
<b>PAR</b>	T FOUR	: APPENDICES AND ANNEXES	69
<b>APP</b>	ENDIX I.	LOGICAL FRAMEWORK OF THE STRATEGIC PLAN	70
		: PLAN OF ACTION	
<b>APP</b>	ENDIX II	I: STRATEGIC PLAN ELABORATION PROCESS	90
<b>APP</b>	ENDIX I	V. COLLABORATION NETWORKS AND MUTUAL PERCEPTIONS (CASE OF	
<b>ACT</b>	ORS IN I	MARACUJA COMMODITY CHAIN)	93
<b>APP</b>	ENDIX V	: PROBLEMS RAISED DURING THE GRASSROOTS CONSULTATIONS	94
<b>APP</b>	ENDIX V	<u>'I: PRIORITY SPECIALITIES OF THE DISTRICTS IN KIGALI-NGALI, KIBUYE A</u>	ND
<b>GIK</b> (	ONGORO	O PROVINCES	96
<b>APP</b>	ENDIX V	<u>II: TABLES ABOUT THE FUNDING INDICATIVE PLAN</u>	98
<u>APP</u>	ENDIX V	<u> 'III: FARMERS' ORGANIZATIONS AND PROXIMITY SERVICES TO PRODUCE</u>	<u>ERS</u>
	104		
<b>APP</b>	ENDIX I	X: SOME PROJECTIONS REGARDING EXPECTED OUTPUTS	. 108
<b>APP</b>	ENDIX X	<u>(. REPORT OF THE VALIDATION WORKSHOP OF THE STRATEGIC PLAN FO</u>	<u> DR</u>
<b>AGR</b>	ICULTU	RAL TRANSFORMATION	. 109

#### **ACRONYMS AND ABBREVIATIONS**

NPA : NON-PROFIT ASSOCIATION
ASZ : AGRO-SYLVO ZOOTECHNIC
ADB : AFRICAN DEVELOPMENT BANK
BNR : NATIONAL BANK OF RWANDA

BOBP

BRD : RWANDA DEVELOPMENT BANK
GC : GRASSROOT COMMUNITY

CDC : COMMUNITY DEVELOPMENT COMMITTEE
CDMT : MEDIUM TERM SPENDIRY FRAMEWORK

WSC : WATER AND SOIL CONSERVATION

NAIC : NATIONAL ARTIFICIAL INSEMINATION CENTRE CNR : NATIONAL POULTRY HATCHERY OF RUBILIZI

SCC : SAVINGS AND CREDIT COOPERATIVE

COOPEDU : DUTERIMBERE COOPERATIVE
CRS : CATHOLIC RELIEF SERVICE
CSC : COOPERATIVES SERVICE CENTRE

BTC : BELGIAN TECHNICAL COOPERATION

DFID : DEPARTMENT FOR INTERNATIONAL DEVELOPMENT
DRSA : REGIONAL DIRECTORATE FOR AGRICULTURAL SERVICES

PRSP : POVERTY REDUCTION STRATEGIC PAPER FAO : FOOD AND AGRICULTURE ORGANISATION

CDF : COMMUNITY DEVELOPMENT FUND

IFAD : INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT

RWF : RWANDA FRANC ( 1 DOLLAR US = 580 FRW)

GECAD : GROUP D'EXPERTISE. DE CONSEIL ET D"APPUI AU DEVELOPPEMENT

HIMO : HIGH INTENSITY MANPOWER
MFI : MICRO FINANCE INSTITUTION

ISAR : RWANDA INSTITUTE OF AGRICULTURAL SCIENCE

KG Kg : Kilogramme

LAE : ANTI EROSION FIGHT

MdFRW: BILLION RWANDAN FRANCS

MIGEPROF: MINISTRY OF GENDER AND FAMILY PROMOTION
MINAGRI: MINISTRY OF AGRICULTURE AND ANIMAL RESOURCES

MINALOC : MINISTRY OF LOCAL GOVERNMENT MININFRA : MINISTRY FOR INFRASTRUCTURE

MiosFRW : MILLION RWANDAN FRANCS

MTEF: MEDIUM TERM EXPENDITURE FRAMWORK

NEPAD : NEW PARTNERSHIP FOR AFRICAN DEVELOPMENT

OC : COMMUNITY ORGANISATION

OCIR-CAFÉ : OFFICE FOR RWANDA INDUSTRIAL CROPS-COFFEE SEATOR OCIR-THE : OFFICE FOR RWANDA INDUSTRIAL CROPS-TEA SEATOR

NGO : NON-GOVERNMENTAL ORGANISATION

PO : PROFESSIONAL ORGANISATION

OPS : PROFESSIONAL ORGANISATION OR PRODUCERS ORGANISATION

FERWATHE: RWANDA TEA FEDERATION

NAP : NATIONAL AGRICULTURAL POLICY CDP : COMMUNITY DEVELOPMENT PLAN

PDDDAA : DETAILED PROGRAMME FOR THE DEVELOPMENT OF AFRICAN

**AGRICULTURE** 

GDP : GROSS DOMESTIC PRODUCT
SME : SMALL AND MEDIUM ENTERPRISES

SMI : SMALL SCALE AND MEDIUM INDUSTRIES PRP : POVERTY REDUCTION PROGRAMME

RIF : RURAL INVESTMENT FACILITY

RNE : NATURAL AND ENVIRONMENTAL RESOURCES

RSSP : RURAL SECTOR SUPPORT PROJECT

M&E : FOLLOW-UP AND EVALUATION

ADS : AGRICULTURAL DEVELOPMENT STRATEGY
AIDS : ACQUIRED IMMUNITY DEFICIENCY SYNDROME

NIS : NATIONAL INVESTMENT STRATEGY SOPYRWA : RWANDA PYRETHRUM COMPANY

SORWATHE: RWANDA THEA COMPANY

SORWATOM : RWANDAN COMPANY FOR TOMATO PRODUCTION SPSS : STATISTICAL PACKAGE FOR SOCIAL SCIENCES

PRS : POVERTY REDUCTION STRATEGY

SWAP : SECTORWIDE APPROACH

UBPR : UNIONOF RWANDAN PEOPLES BANKS NUR : NATIONAL UNIVERSITY OF RWANDA

USD : UNITED STATES DOLLAR

## **EXECUTIVE SUMMARY**

- 1. In the framework of the implementation of the 2020 vision and the Poverty Reduction Strategic Plan, the Government of Rwanda has chosen to make rural development and agricultural transformation, to spearhead the embarking on a new era of a quick and sustainable development. The growth rate that assigned to this sector is of 5 to 8% so as to reach its expected objectives.
- 2. In the present context, this perspective confers to the agriculture sector a heavy mission whose realization requires deep changes in the conception and in the implementation modalities as well as in the roles and responsibilities of different actors.
- 3. In full conformity with the national plan for elaboration of sector strategies, the Ministry of Agriculture and Animal resources has elaborated the agricultural policy and strategy documents within the spirit of these dynamics of change.
- 4. The exercise was conducted in two phases: (i) during the first phase, the agricultural policy documents were elaborated on the basis of broad consultation with all partners. (ii) In the second phase, MINAGRI initiated a grassroots consultation process, concurrently with thematic analyses, which were conducted to define the agricultural strategy, sub-sector strategies, priority programmes and an action plan 2005-2008.
- 5. On the conceptual plan, the exercise introduces two innovations. (i) For the very first time in the history of Rwanda, a participative planning approach individually associating 106 country districts has been implemented for the elaboration of the agriculture strategy. This consultation happened to associate beneficiaries to meditation, to put together their points of view and identify their needs to be integrated in the sectional strategy as well as in the hierarchy of actions to undertake. (iii) The elaboration of a data base on the beneficiaries needs lays the foundation for both an institutional memory and a collaboration platform; it allows to make preoccupations of beneficiaries and grassroots communities the permanent focal point for the actions in the agricultural sector
- 6. More than a simple appellation and far from the methodological innovation described above, the Strategic Plan for Agricultural Transformation in Rwanda, clearly shows the concern to bring innovations within the sector and in a sustainable manner, the dynamics of change leading towards modernization.
- 7. On the content level, the innovation of SPAT, as compared to policies and strategies of the past, is based on voluntaristic stimulation and incentives for the production systems towards regional specialization, producer's professionalism, commodity chains and the market-orientation.
- 8. The voluntaristic eagerness of agricultural households to move away from subsistence economy to a market economy is coupled, at the same time with accompanying measures, which allow anchoring agricultural production within a market economy. In this new environment, the producer is closely linked to markets both upstream and downstream of production, thereby taking into account the probable chocks that may affect vulnerable zones and groups in the country with regard to food security.
- 9. The present report is divided into four parts. In the first part, the document describes the framework and the current context within which the sector is developing and presents a diagnostic analysis of the sector, as well as preliminary results from grassroots consultations. In the second part, the document presents the SPAT's challenges, its mission, its objectives, its key principles and strategic axes. Then, the analysis presents the four priority programs as well as actions that are expected from support sectors to

- agricultural production. The third part deals with the action plan and the indicative financing plan. The fourth part includes appendices, description of methodological aspects, the logical framework and technical details.
- 10. With regard to methodological and implementation modalities, the innovation lies in the definition and recourse to a concrete step of participation, giving population responsibility and ownership and decentralization in the process of planning, monitoring and evaluation, integrating modern tools of information and communication technologies.
- 11. The principal clear-cut elements derived from the analyses and the agricultural sector diagnosis (first part) show that the challenge of transformation and modernization is huge.
- 12. The sector has 1,4 millions households. These have an average of 0,76 ha of land, which is subjected to an advanced degradation process due to intensive erosion which leads to soil losses estimated at 14 millions tonnes annually.
- 13. The recourse of the current production systems to traditional production techniques in utilisation of the resources of soil, water, labour and capital and the low level of use of modern inputs leads to very poor performances. The coverage rate for food needs from production is estimated at around 87% for calories; 70% for proteins and 22% for lipids. The infant malnutrition rate that found out in 2002 was 24%. In some provinces such as Gikongoro, Kibuye and Butare, the malnutrition rate reaches 40 to 50%. The levels of soil productivity and of labour are very low. In 2002, value productivities are estimated at an average of 235,000 Rwf per cultivated hectare and between 78,000 and 117,000 Rwf per person and per year; respectively representing 408 USD/ha per year and between 136 and 204 USD per person per year.
- 14. It is in within these conditions that the mission of the strategic plan for agricultural transformation situated. This mission is derived from upstream orientations (Vision 2020, PRSP) and aims at ensuring prosperity and sustainable and improved living conditions for the rural populations in a modernized and organized agriculture.
- 15. The overall objective of the sector is to contribute, in a sustainable way, to poverty reduction and to support Rwanda economic growth through increase of productivities of production factors, maximum production development, revenues opportunities diversification, environmental and natural resources protection. The agricultural sources for agricultural growth will be of two types: those which are linked to export potential within the commodity chains and those which are related to internal market development, essentially the cereal commodity chains (rice, maize), milk, meat and vegetable crops.
- 16. The SPAT is based on a series of guiding principles. (i) it is in the first place a participatory and pro-poor strategy. This option results from the fact that the majority of the population is rural, lives on agriculture and it is within this sector that we find the majority of poor people. It makes beneficiaries and their communities be represented at all levels. (ii) the strategy is progressive, flexible and dynamic. One has to be aware that the new voluntaristic vision of agricultural development engages populations towards new destinies and that some risks may be associated with this process along this road. The strategy is conceived in such a way that enables necessary adjustments and to take into account possible circumstantial changes (iii) the strategy is based on the demand-driven approach and on producers' motivation This is to take into account producers' negotiated free choices; public administrations that intervene in the orientation by putting in place appropriate motivation mechanisms. (iv) the strategy is sensitive to questions related to gender, youth, environment and AIDS. At any step, moment and area, these dimensions have to be considered within actions of planning and implementation. (v) The strategy will be based on the principle that agricultural development essentially concerns the private

sector and producers, who make it. But, at present, the role of the Government is crucial. It will be redefined in order to reinforce the ownership and responsibilities of the communities, producers associations, private operators as well as partnership between the Government and these actors. (vi) it will apply the principle of subsidiarity, in the sense that the interventions and responsibilities of public services, which will be significant at the beginning, will have to progressively be handed over to communities and to the private sector. (vii) Allocation of Government financial resources will be done with priority towards most competitive actions and productions.

- 17. Ten strategic axes of the PSTA have been defined on the basis of the orientations of the National Agricultural Policy and of the National Poverty Reduction Strategy: (i) diversification and intensification of crop, animal and aquatic production; (ii) diversification of sources of incomes and rural employments; (iii) link of production with market and integration of agricultural economy within the national and regional economy; (iv) sustainable management of natural resources and particularly of water and soils; (v) organization, mobilization and reinforcement of capacities of producers and professional organizations; (vi) reinforcement of service providers' capacities, privatisation and private sector promotion; (vii) creation of a conducive institutional framework for producers' professionalisation and agricultural transformation. (viii) creation of a conducive environment, favourable to productive investments and to entrepreneurship and employment development in agribusiness; (ix) redefining the role of MINAGRI and the restructuring of its actions towards the sector program approach within the decentralization framework; (x) promotion of gender approach and reduction of vulnerability of underprivileged groups.
- 18. The analysis based on thematic and sub-sector approach enabled to identify four programs and 17 sub- programs, which are clearly detailed in the main document.
- 19. The program "intensification and development of sustainable production systems "comprises: (i) sustainable management of natural resources and water and soil conservation (ii) integrated livestock systems; (iii) marshland development; (iv) irrigation; (v) supply and use of agricultural inputs; (vi) food security and vulnerability management.
- 20. The program of "strengthening of organization and support capacities for professionalisation of producers" deals with (i) the promotion of rural organizations and the reinforcement of producers' capacities; (ii) restructuring of proximity services to producers; (iii) rural innovation and research for development; (iv) rural financial systems and agricultural credit development.
- 21. The third program consists of "Commodity chains promotion and agribusiness development". It is composed of four sub-programs: (i) creation of a conducive business environment and promotion of entrepreneurship; (ii) commodity chains promotion and development; (iii) processing of agricultural products and competitiveness; (iv) rural support infrastructures.
- 22. The fourth and last program refers to "legal framework and institutional development". Its three sub-programs are: (i) legal and regulatory framework reform; (ii) public services reform and institutional support; (iii) coordination and evaluation of the agricultural sector
- 23. For SPAT implementation, MINAGRI will benefit from support actions of other Ministries and other partners in the fields of governance and local development; environment, water and land security, education and scientific research, commerce, industry, handicrafts, health and social protection, transport and communication infrastructure (ICT), as well as the financial sector. Harmonization of actions of the different actors will be sought and integrated in the on-going decentralization actions.

- 24. An action plan has been elaborated for the implementation of the SPAT. Two phases have been distinguished.
- 25. The first year (2005) is considered as a pilot phase. It is partly meant for perfection of the strategy and its operational tools, mobilize the partners and resources and prepare a Medium-Term Expenditure Framework (MTEF) for the period 2006-2008. It will also be devoted to the formulation of specific policies in some important domains such as extension, communication and gender. It will also be used to restructure MINAGRI, redefine its missions and the roles and responsibilities of all stakeholders in the sector. The year 2005 is a year of initiation of pilot actions, particularly in commodity chains sector, agribusiness and the establishment of an Agricultural Guarantee and Credit Fund.
- 26. The second phase, which covers 3 years, corresponds to intensive implementation of priority programs according to defined priorities and to MTEF. It is only after this periods that the sector will enter in its phase of rapid development.
- 27. Given various risks, which can occur, implementation of this plan will be flexible and will take into account adjustment mechanisms, which will be elaborated and applied as the need arises.
- 28. These risks will be regularly assessed within the framework of implementation and using the mechanisms of participatory Monitoring and Evaluation systems. These systems are in conformity with those of he Poverty Reduction Strategic Framework.
- 29. /Soon after the adoption of the SPAT by the Government, an indicative financing plan for the SPAT will be elaborated, based on two elements: (i) financing needs identified during the participatory workshops in districts and (ii) projects identified through thematic analyses
- 30. The approach which will be use to finalise the indicative financing plan is based on the following elements: (i) the necessary funds for the 4 programmes and 17 subprogrammes of the SPAT for the period 2005-2008, (ii) the general and annual PIP previsions for the same period (about 103 Million USD), (iii) additional needs of SPAT in case the PIP resources are insufficient, (iv) the amounts of non-disbursed resources for on-going projects in the agricultural sector and new approved projects (estimated at a total of 139.4 Million USD), (v) estimate of the level of private investments in the agricultural sector for the period 2005-2008.
- 31. The SPAT and its financing plan, once approved by the Government, will be a subject for consultations at the donors round table planned to take place before the end of 2004. It will go into application from 2005 with resources already available from on-going projects in the agricultural sector, while mobilising additional resources.

**PART ONE: OVERVIEW** 

# I. GENERAL INTRODUCTION

## 1.1. Justification of the Strategic Plan for Agricultural Transformation

- 1. Right from the years 1998-1999, the Government of Rwanda initiated a planning process aimed at transforming the economy and reducing poverty which would lead the country to be categorised among medium income countries
- 2. After mapping up some basic future prospects in the 2020 Vision, the Government put in place a National strategy for Poverty Reduction (June 2000- June 2002). Its implementation will be based on the formulation and elaboration of strategies for the essential sectors of the economy.
- 3. In order to facilitate the process for various sectors, the Ministry for Finance and Economic Planning (MINECOFIN), through its Directorate of Strategic Planning and Poverty Reduction Monitoring, prepared guidelines for the preparation of sector strategies and decentralised development plans.
- 4. The Ministry of Agriculture and Animal Resources has just formulated a National Agricultural Policy (NAP), which gives clear orientations in terms of development in the agricultural sector for years to come. These orientations will serve as a base for the elaboration of a National Strategy for Agriculture, designed to articulate the National Agriculture Policy in an operational framework and the central role of the agricultural sector for the rapid economic growth projected by the Government of Rwanda.
- 5. Through this framework, the Ministry of Agriculture and Animal Resources was able, through a participatory and interactive approach, to conceive a process of formulation and operationalisation of the NAP whose first step was the formulation of the sector strategy comprising of sub-sector strategies, action plans and relevant budgets for the 2005-2007 period. The strategies and action plans were inspired by the National Investment Strategy, especially in the way it is streamlined in the Public Investment Programme and within the formats of the Medium Term Expenditure Framework.

# 1.2. Methodology

- 6. The agricultural strategy documents were prepared and designed in conformity with the methodology recommended by MINECOFIN. These documents were designed using the broad sector approach, thus responding to their political will, contained in the National Poverty Reduction Strategy which confers to the agricultural sector that is the pillar for rural development.
- 7. The SPAT elaboration exercise is also based on four basic principles: (i) The internalisation of the process through serious involvement of the staff of MINAGRI and other Ministries on one hand and the mobilisation of national consultants on the other. (ii) Participatory consultation at the District and Provincial level. (iii) Total integration of the work within the decentralisation policy. (iv) collaboration with development partners in the technical as well as funding plan including the steering level.
- 8. Practically, a three axes methodology was developed: (i) participatory workshops at District, Province and National level; (ii) progressive consultation of a database (on current projects and new ones) using a format project profile that is automatically integrated into the MTEF; (iii) structural and thematic analysise.

- 9. The national agricultural strategy, in conformity with the guidelines given by MINICOFIN, integrate different elements, particularly the vision for the overall development of the agricultural sector, in coherence with Vision 2020 as well as the sector policy, which is clearly presented in the Agricultural Policy Document. This document will be referred to later for details regarding definition for the concepts for the mission, objectives, strategy, programmes and budgets
- 10. The present document is explicitly developed under the name "Strategic Plan for Agricultural Transformation" in order to reflect the radical changes introduced by the new agricultural policy. These include particularly the following:
  - i. Moving away from agricultural substance economy towards a market economy;
  - ii. Intensification and progressive modernisation of the agricultural sector:
  - iii. New distribution of roles and responsibilities between all stakeholders in conformity with new policies regarding the Government disengagement from some sectors and decentralisation;
  - iv.New methods of work in relation with the Programme approach adopted by MINAGRI in order to realise the SPAT objectives.
- 11. This document consists or four parts: the first part is general and deals with the diagnostic the sub sector. The second part develops strategies and priority programmes. The third part consists of the action and indicative plans and the fourth part contains annexes.

#### II. STRATEGIC AND INSTITUTIONAL FRAMEWORK OF THE SPAT

# 2.1 International and Regional context

- 12. The coexistence of new technologies and different ways of life in the World has, in the last decades, produced abundant literature with controversies on theories of economic growth and development. Until today, for some people industrialisation is still considered as the engine of development and agriculture as an essentially static sector with limited potential
- 13. Despite some efforts and often mitigated results in the macroeconomic field during the recent decades, different indicators at microeconomic and social level in a number of developing countries have shown that in most of those countries where reforms were geared towards the first optic, the standard of living of the people seemed to deteriorate instead of improving. The phenomenon of poverty, instead of declining, intensifies and becomes more and more complex.
- 14. It appears well established that in many third world countries, agriculture is worryingly declining and poverty is intensifying in rural areas and it is the farming population who suffer most.
- 15. The case for the African continent is alarming. More than 200 million people in Africa, about 25 % of the population on the continent, are chronically undernourished. Resort to food aid has reduced the region to being more dependent than any other developing region in the world.
- 16. This situation has led concerned partners to focus their development policies on food security, poverty reduction and sustainable use of natural resources. Hence various fora have concentrated their effort on these problems, notably: the World Social Summit of 1985 and the World Food Summit (Rome, Italy in November 1996) and the United Nations Conference on Development Financing (Monterrey, Mexico in March 2002). These meetings confirmed a paradigm change and dedicated to the millennium the objective of poverty reduction and commitment to results. In most of these developing countries, agricultural development seems to be a necessary pre-condition for structural transformation of the economy and for industrialisation.

- 17. African leaders recognise that agriculture is the base for their economy. Sustainable agricultural growth is not only essential for reducing hunger, poverty and inequality, but it is also equally fundamental for economic development.
- 18. In order to put to an end the decline in the agricultural sector on the continent, African leaders have committed themselves to put in place through NEPAD (New Partnership for African Development), a Detailed Programme for the Development of African Agriculture (DPDAA), the objective being to restore overall growth, to promote rural development and to ensure food security in Africa. The Maputo declaration underscores the necessity to allocate at least 10% of national budgets to the agricultural sector.

## 2.2. Political, Economic and Social Context.

- 19. Ten years after the 1994 genocide, Rwanda has recorded big achievements on the political scene including:
  - (i) Total restoration of security on the whole territory
  - (ii) Putting in place and normal functioning of transition state institutions;
  - (iii) The reintegration of Rwanda in the Community of nations;
  - (iv) The progressive implementation of the decentralisation policy;
- 20. Based on the above achievements the country has embarked on a further political turn: the processes of consolidating constitutional base of power by adopting a new constitution through a referendum (May 2003) and the election of her leaders through a direct ballot (July 2003). This has opened horizons for creating a progressively stable environment that creates confidence for Rwandans as well as foreign investors.
- 21. The Rwandans economic context is characterised by a relatively high economic rhythm, a voluntaristic vision for the future and development policies focusing around poverty reduction, food security, diversification of the economy and decentralisation.
- 22. Economic growth rate was 6,6 % of GDP in 2001, 9,4 % in 2002, and 1 % in 2003. Inflation rate and exchange rate fluctuation are relatively moderate. The public finance situation has progressively improved, thanks to the effort applied in the fiscal policy. Public revenue collection grew from 11.8 % of GDP in 2001 to 12.3 % in 2002, 13,5% in 2003 whereas public spending is in decline, falling from 22 % of GDP in 2001 to 20.1 % in 2002 and 20 % in 2003.
- 23. The performance of the Rwandan economy depends mainly on the production of the primary sector, in which agricultural(particularly food crops) production is essential. For example, the low growth registered in 2003 (2.4%vs 9.4% in 2002) was due to the low agricultural production ,which fell from 15% to 1%. This poor performance, resulting from poor rains, adversely affected food crops. This situation had a negative impact on the national prices, and combined with the imported inflation, led to an animal inflation rate of 7.4% as compared to the projected 3%. Poor performance of the agricultural sector also aggravated poverty in rural areas, as agriculture is the most important source of income.
- 24. Several factors contribute to the stagnation observed in this important economic sector. Besides the structural problems, one can cite, among others, the climatic conditions and the low level of investments, caused by the insufficient level of adequate mechanisms, scarcity of long-term capital resources in Rwandan commercial banks and the sector specific risks.

- 25. The problem of low level of investment constitutes one of the most important hindrances to the growth of the primary sector in Rwanda. It is connected, on one hand, with the sector's intrinsic parameters, but also with the general economic environment in the country, on the other hand. The financial sector is not interested in the agricultural sector and according to the financial and banking institution, the sector is considered as a high—risk one for their capital. This is the reason why the level of financing of the agricultural sector has fallen drastically since 1990, such that it has become almost insignificant from 1998( it remains below 1%)
- 26. However, until 1989, agriculture was considered to be an important sector of the economy and profited from favourable conditions within the monetary policy framework. Incentive measures were given to this sector, especially through favourable interest rates and matching loans.
- 27. The new policy of liberalization and the elimination of matching loans adopted by BNR, has almost caused the exclusion of the agricultural sector, as removal of such favourable treatment, the sector was abandoned by the banking sector. The commercial and other activities are favoured as they bear fewer risks as those in the agricultural sector. Financing of the agricultural sectors by the Government budget is very low. As an example from 2002 to 2003, the budget allocated to the agricultural sector fell from 4.5 % to 2.94 0 % of the total Government budget, representing respectively 1 % and 0,5 % of GDP. The low level of public revenues have also an impact that the allocated budgets do not necessarily take into account the proposals made within the poverty reduction strategy.
- 28. This situation is aggravated by the low absorptive capacity of the agricultural sector. In 2004, for example, only 25.5 % of the development budget been utilized by the end of June (Budget Framework Paper 2005-2007) This problem of absorptive capacity is a result of a number of reasons, including: weak capacities of implementation projects in the sector, lack of sector and sub-sector strategies lack of adequate coordination but also due to lack of some information and data about some expenditures.
- 29. The Government of Rwanda has not only the will to maintain this performance but is also committed to some actions geared towards improving on it, and to ensure a firm sustainable and economic growth. Among those actions the following can be mentioned:
  - the formulation of a prospective long term "Vision 2020 for Rwanda"
  - the formulation and adoption by all partners of the "National Poverty Reduction Strategy"
  - the elaboration of the National Investment Strategy
  - the preparation of the sector policy and strategies covering different priority areas.
- 30. It is more precisely due to this special context of poverty in Rwanda that sector policies and strategies aimed at improving people's standard of living must be organised.
- 31. In the last ten years, Rwanda has faced enormous social challenges especially in terms of National Reconciliation, Settlement and Reintegration of genocide survivors and refugees, rehabilitation of basic social services (education, health, water, hygiene, etc.....) and the fight against AIDS.
- 32. The National Reconciliation process has been centred around: (i) arresting of suspects of genocide and bringing them before the law; (ii) defining and establishing a system of judgement that encourages people's reconciliation under GACACA; (iii) social reintegration of former refugees (before 1994); survivors refugee, and following the 1994 genocide.

- 33. Basic services have been rehabilitated and new programmes are underway in the framework of the National Programme for Poverty Reduction. But a lot of effort is necessary because there are heavy requirements in terms of infrastructure (schools, health centres, hospitals), human and financial needs and the population is ever growing (8.5 million in 2004 and a demographic growth estimated at 2,5 % in 2004).
- 34. Special attention will continue to be attached to AIDS pandemic whose prevalence rate was estimated at 11.2 % in 2002.

# 2.3. Rwanda Experience in Agricultural planning and Development

- 35. In the last four decades, agriculture in Rwanda has gone through three distinct and contrasting periods:
  - (i) a twenty year period (1960-1980) characterised by high growth;
  - (ii) a period of stagnation followed by a serious repression (1980-1994);
  - (iii) a period of reconstruction and economic recovery (after 1994).
- 36. These periods were characterised by three different approaches in the formulation of agricultural policies:
  - (i) five or ten year plans 1950 and 1990 with a period of not activity from 1960-1967;
  - planning based on the adoption an economic policy and financial framework and an elaboration of Public Investment Programmes (1991-2002);
  - (iii) the new form of planning based on a long-term vision, a national strategy for poverty reduction and sector strategies.
- 37. There is a marked characteristic in the history of past agricultural policies in Rwanda and that is their similarities: In the course of the past 40 years analytical elements have remained the same: scarcity of land, small farms, overpopulation, poor productivity in terms of soil and labour, degradation of the basic capital land extension policy, out of touch with realities of the agricultural production etc... Equally, there was no variety in strategies and policies: improvement in productivity, regional specialisation, and development of a marked economy, agriculture-livestock integration, diversification of export crops, etc.
- 38. In spite of the presented problems, and the state of the recommended agricultural policy measures, the rural area sometimes do not associate being concerned with programmes and projects put in place in order to contribute to improvement of the living conditions of the rural population.
- 39. At certain times especially in 1989-90, some developments were introduced in the name of agricultural policy. Hence the concept of food security replaced the concept of self-sufficiency in food. This helped in adjusting the objectives and programmes. The concept of development of commodity chains equally developed at the time, leading to the necessity to streamline all operations of production, transformation and communication in an integrated manner. The concepts of specific projects as a priority were also introduced to deal with purely agricultural aspects, linking agriculture, extension work and research as partners in the development of the agricultural sector.
- 40. On the whole, it can be said that the evolution of agricultural exploitation system in Rwanda was characterised by two factors: the demographic factor on one hand and the institutional factors connected to the interests of the colonial administration and the development of export crops on the other.
- 41. The duality (food crops cash crops) which appeared in the colonial agricultural policy system was continue and amplified by the post-colonial effects from the above mentioned two types of factors.

- 42. Demographic pressure combined with the colonial administration policy of holding back some land for cash crops (at least during the colonial era) were principally responsible for modifications in food crops production. But adjustments remained at the primary level, and did not substantially modify the methods used or the level of output. It was as if agricultural production was just contented with adjustments necessary for minimal subsistence needs. This kept them at a very low equilibrium leading to poverty conditions existing today.
- 43. Contrary to that, an outward looking agricultural policy of cash crops for export (coffee, tea and pyrethrum) led to rapid incorporation of these crops, through research and extension services, into the traditional cultural system together with accompanying technical packages.
- 44. It should be noted, however, that in as far as these innovations were concerned, rwandese farmers tended to resist them in favour of their traditional substance farming and this held back for a long time some new dynamics on which to base the desire to elevate their standard of living. Even though the policy of high prices for cash crops for export and high demographic pressure seen to be important factors for setting in motion new dynamics, experience has shown that the level of such adjustments was not enough to stimulate growth and development. Technology was quite rudimentary and the level of land productivity and labour were at a very low level.
- 45. Finally, it is a fundamental change in the whole institutional environment of the country, long term commitment and development approach that are going to determine the rapid development of the agricultural sector in Rwanda. It is in the framework of that new environment that a new strategy has been defined with the participation of the beneficiaries. Mobilisation, involving and making these people take responsibility in the formulating and implementing this new strategy whose corner stone lies in the improvement of technology and productivity, together with a shift towards markets should make a difference with the past situation and should lead to considerable improvement in the standard of living of the population.

## 2.4. Decentralisation and Community Development Plans

- 46. The agricultural strategy will draw lessons from the experience of development projects in Rwanda, which exhibit a huge number of deficiencies, that merit correction:
  - (i) projects were often conceived by foreign experts in collaboration with the central administration, but without any participation of beneficiaries in the choice or decision-making. The result is that people find it hard to take over any operations in the framework of classical projects and sometimes these operations come to a halt once donor funding is over
  - (ii) Exclusive recourse to foreign resources, without sufficient involvement of grassroots communities has often resulted in high project costs in relation to the benefits
  - (iii) Poor consideration (or none at all) of the social equilibrium and equality in classic interventions has often accentuated socio-economic disparities;
  - (iv) The rural development problems are handled in a sectaries manner, without dissociations, and without taking into account the intertwining nature of some subsystems and their integration into the overall system.
- 47. Following the logic of decentralization political line, the Government has instituted a process of decentralised community planning through a harmonised framework. Through that framework, almost all Districts and all Provinces in the country possess a Community Development Plan (CDP) designed on a participatory basis. Results from this process were used in the elaboration of the definition of the agricultural strategy .

## 2.5. Commitment to create new articulations in the development process.

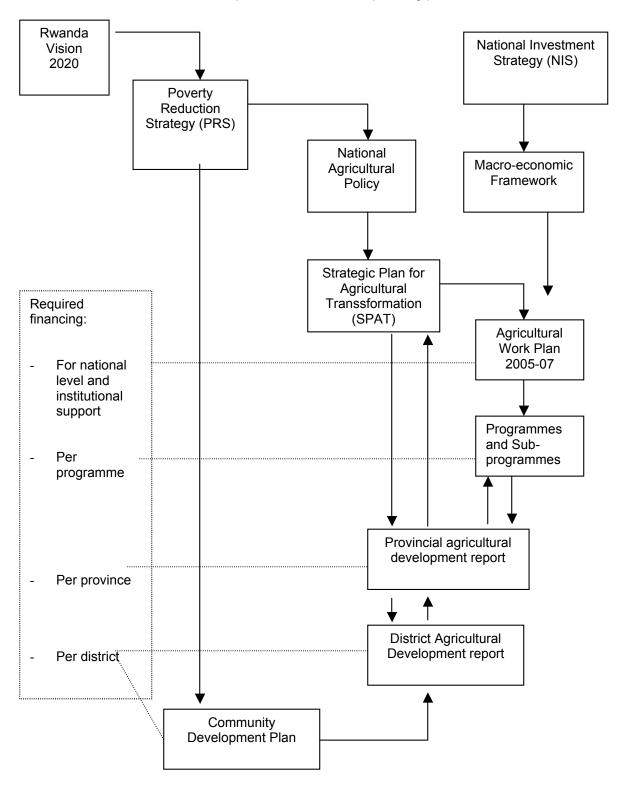
48. For the National Agricultural Policy to be operational, it will be necessary to inject a new articulation in the sector planning process. This articulation will be based on four principles:

- (i) creation of a platform for communication between, and coordination of different stakeholders of the sector;
- (ii) linking the national level to decentralised levels;
- (iii) articulation of financial flows to decentralized levels of implementation and multistakeholder environments;
- (iv) articulation of commercial perspectives and market orientation to food security, environment and sustained economic growth.
- 49. Bringing together different stakeholders, in an appropriate framework, will allow the public and private sectors and the civil society to work together, with a view to sharing roles and responsibilities, harmonising the conception of strategies, approaches and modalities of implementing their various interventions. Creation of such platforms will ensure efficient coordination of technical and financial support from different development partners.
- 50. It will be very necessary to strengthen the new articulation between the central (national) level and the decentralised levels. Decentralised Entities- that is: Provinces, Districts, municipalities (cities, sectors and cells) will take responsibility in drawing up their development plans and their implementation.
- 51. The modalities for facing these different challenges will determine the definition of the most appropriate financial flows. Subsidiarity principle will guide the delegation of responsibility from the central level to the decentralised levels. It will also lead to progressive withdrawal of the State where and when the public sector and the private sector and/or the civil society can take over former Government tasks. It is a major challenge to find appropriate financial mechanisms to support theses new partners and support them to implement activities at decentralised levels.
- 52. National policies consider the agricultural sector to be a springboard for the fight against poverty. Economic growth in the primary sector should raise rural households from their situation of generalised poverty. This economic growth would equally initiate progressive development in secondary and tertiary sectors. This would create off-farm employment. However, most of the agricultural farms are still subsistence-oriented. The Agricultural Development Strategy should reconcile market-orientation with the search for food security and the preservation of the environment. On the other hand, it is important to put mechanisms in place, which guarantee that different categories of agricultural farmers, especially the most vulnerable, benefit from the economic growth that is being advocated.

# 2.6. The place of SPAT in the national planning system.

53. The Strategic Plan for Agricultural Transformation results from an interactive and participatory planning process that combines a bottom-up approach with the macro-economic top-down planning approach.

FIGURE I: SPAT position in the national planning process



## III. GENERAL CONTEXT OF THE AGRICULTURAL SECTOR

#### 3.1. General Profile

# 3.1.1. Overview on the agricultural sector

- 54. For many reasons, the Government perceives the agricultural sector as the major engine of growth: (i) Rwanda is the most densely populated country in Africa. For 2004 the population is 8.5 million people on a surface area of 26,338 Km2 including water surface. The population density is 325 people per square kilometre. Even if one would admit that annual population growth will progressively go down after 2010 up to 2.2 % in 2020 as foreseen, the growth rate of 2,5 % par annum in 2002 will lead to a population of about 12-13 million in 2020, bringing about 50 % increase in the space of 16 years; (ii) The Rwandan economy is based predominantly on agriculture. The population engaged in agriculture was 87 % in 2002, it provided employment to 88 % of the population, it contributes 47 % to GNP and accounts for 71 % of the country's export revenues. The quasi-totality of agricultural production is realised from about 1.4 million households. The average size of a family farm is 0.76 ha, 66 % of the total food production is for family consumption. The food that reaches markets (34 % of the total food production) feeds non-farmers- (estimated at about 11.4 %), but also farmers who do not produce enough and have to buy more from the market to satisfy their needs.
- 55. The absence of minerals and other natural resources, the landlocked ness, the current low level of industrialisation, and the low purchasing power of the population largely explain why agriculture and animal husbandry will, in the period covered by Vision 2020 and the National Poverty Reduction Strategy, be the main engine for accelerated economic growth and sustained development.
- 56. Despite the fact that grandees farmers usually adopt to changing conditions, 24-25 some indicators point at a worrying evolution if the process of transformation and modernization of the agricultural system is not embraced in time:
  - (i) Agricultural farms are facing more and more difficulties in ensuring family subsistence, particularly during draughts; families are regularly confronted with food and nutritional shortages, either seasonally or throughout the year;
  - (ii) Traditional techniques for regeneration of soil fertility, such as fallow are no longer possible:
  - (iii) The decline in animal and manure production and erosion resulting from poor deforestation brings with it a worrying decline in soil fertility;
  - (iv) The incomes derived from the sale of agricultural products are not sufficient to cover other households' needs.
- 57. It is hence easily understood that in such a context, the poverty reduction strategy in Rwanda must give the first priority to "rural development, and especially the transformation and modernisation of the agricultural sector."

## 3.1.2. Typology and characteristics of agricultural farms

58. According to a study carried out for MINAGRI/FAO on production systems in 1997, three types of farmers with specific characteristics and strategies were identified.

TYPE A: "the small dependent farmer" with a small piece of land- his homestead, which cannot produce enough food for the family's subsistence – he has to engage in other activities (trader, hauling, crafts etc...) or sell his labour to someone else to complement his farm output.

TYPE B: "The self-sufficient farmer" This type has just adequate farmland and labour to satisfy his family's food needs. Other activities outside farming (trade, handicrafts) are an addition to his farm output and important to the family as extra income.

TYPE C: "production system using capital" is more heterogeneous. A first sub-group is close to type B but has more production factors whereas a second sub-group is composed of absentee farmers (businessmen, civil servants) who pursue land acquisition and accumulation strategies.

- 59. Small production units perform better per land unit than larger ones. However, intensive farming (without farm inputs) results in over cultivation of land with severe consequences in terms of fertility and sustainability. Poor availability of production factors limits land exploitation; Type A (and B) families will look elsewhere to satisfy the needs of their families. The biggest production units have high potential, which is not well exploited.
- 60. Production systems in Rwanda are characterised by: small family farms with an average of less than one hectare in size, integrating polyculture animal production system. These represent 90 agriculture % of the production units and cover about 1.2 million hectares. Cultivation techniques are purely manual which require a lot of labour force. About 11.5 % of the households have no land to cultivate. Analysis of TABLE N° 7 shows that 43.2 % of the households had less than 0,5 % ha in 2000 and occupied only 25.1 % of the surface area. Land shortage leads to widespread poverty and families who have to survive on the proceeds of some plots of level.
- 61. Rwandan agriculture is composed of complex farming systems based on a diversity of crops. These are characterised by:
  - (i) a common type in all regions composed of 7 major crops;
  - (ii) regional specific crops according to specific agro-ecological (altitude, soils) and socio-economic (communication, markets, farmers organisations etc.); conditions;
  - (iii) animal production systems, which play an essential role in the family economy and in the management of soil fertility (availability of manure).

## 3.1.3. Sector institutions

- 62. The Agricultural Sector Institutions include:
  - (i) public institutions at the central level units
  - (ii) local authorities at decentralised levels.
  - (iii) private institutions;
  - (iv) civil society;
  - (v) other development partners.
- 63. At the Central level one can distinguish two types of institutions concerned with the Sector. The Ministries and the public or semi-public autonomous institutions under MINAGRI.
- 64. Ministries share the following responsibilities: policy formulation, strategies, operational programmes for agricultural policy (MINAGRI); planning of Agricultural Public Investment Programmes (MINECOFIN), natural resource management related to agriculture such as land, water, environment (MINITERE); road infrastructure and energy to facilitate intensification and modernisation of agriculture (MININFRA); coordination of development activities at Provincial and District levels (MINALOC); gender promotion, and capacity building for women engaged in agricultural activities (MIGEPROF); training in modern agricultural techniques and other professional training (MINEDUC).
- 65. Among the main public or autonomous semi-public institutions involved in the agricultural sector are: the RIEPA, which promotes local and foreign investors in the agricultural sector, BNR which ensures the supervision of credits and savings financial services in the agricultural sector, and the Rwanda Development Bank (BRD), which is the spearheading institution in the financing

- of agro-industry, and the "Union des Banques Populaires" (UBPR), which is specialized in mobilisation of rural savings and small scale credits.
- 66. Parasitical and other support structures include: research institutions (ISAR, IRCT), teaching institutions (Faculty of Agriculture at the National University of Rwanda, KIST, ISAE Busogo), some NGOS involved in research (development research) as well as offices responsible for the management of tea and coffee (OCIR-THE, OCIR-CAFÉ). The Ministry also manages some agricultural production support units like the National Centre for Artificial Insemination, the National Veterinary Laboratory at Rubilizi, the National Seed Service and the Rubilizi National Poultry Hatchery. These Institutions play an important role in the development and adaptation of appropriate technological innovations in the sector .
- 67. The implementation of agricultural policies and programmes is under the responsibility of districts and at provincial level under coordination of the Prefet. At the Provincial level the agricultural activities are coordinated by the Director of Agriculture, Livestock and Forests (DAEF) and at district level all agricultural activities are coordinated by the Officer in charge of the District Agricultural Services (RSAD).
- 68. All activities related to planning, execution, follow-up, evaluation and reports are coordinated the hierarchy of MINALOC, Province and Districts: Regular reports are made by the RSAD to the DAEF who in turn submits the report to the Prefect. The latter sends a provincial report to the Minister responsible for Local Administration (MINALOC) who in turn sends it to all Ministries concerned.
- 69. Different private Institutions are also interested in the agricultural sector. Many entrepreneurs in the private sector such as the "Rwanda Private Sector Federation (RPSF), which brings together seventeen professional and sector associations and six provincial associations, are becoming more and more involved in agriculture. Commercial Banks and UBPR are important Institutions as far as financing investments in agriculture are concerned. The number of micro finance institutions is growing steadily and these will equally play an important role in the agricultural sector.
- 70. Agricultural Development Projects and programmes are often largely financed by development partners. The Public Investment Programme (PIP) 2003-2005 indicates that most of the funding in the agricultural sector is foreign funding (88.3 %). The multilateral funding Institutions are the World Bank, ADB, FIDA, EU and BADEA; United Nations Agencies such UNDP and FAO. Bilateral cooperation partners such as USAID, Netherlands, Belgium, China, Germany, Italy, Canada, Great Britain, and International NGOS are equally involved in the sector.
- 71. A number of agricultural projects financed through loans are characterised by a low level of disbursement, due to the poor absorptive capacity of the services responsible for their implementation as well as the complexity of the donor procedures or delays in operations.
- 72. Several organizations and associations are also partners in the agricultural sector either as service providers or beneficiaries in different projects and programmes. Community-based organisations play a big role in the organisation of farmers and extension services, as well as in the marketing of agricultural products.
- 73. The agricultural professional organizations are the major beneficiaries of the sector, not only primary beneficiaries of various projects and programmes, but also as service providers and service intermediaries at different levels, such as micro finance programmes. There are a number of agricultural cooperatives and associations operating at national level. These include the Union of Tea growers (FERWATHE) the coffee growers cooperative and the Association of Rice growers. Some organizations, such as the association "MBARAGA" grouping agriculturists and

livestock keepers, and currently active in six provinces in Rwanda, are gradually taking a national outlook in their provision of services.

# 3.2. Specific characteristics

# 3.2.1. Poverty in rural areas

- 74. The general overview of poverty in Rwanda reveals the following: (i) the average annual per capita income is about 250 USD; (ii) population below poverty line in 2000 was 64 % and 60 % in 2002 (iii)estimate household under the poverty line in rural areas is higher (68 %) than urban areas 23 %; (iv) levels of agricultural yields are very low and on decline and 66 % of the production is for subsistence and 34% commercial, (V) export revenues represent about 16 USD per capita (Sub-Sahara Africa's average is 100 USD) (vi) quantity of utilized fertilisers is 2kg per hectare per year.
- 75. The poverty line was established in 2000 and set at the expenditure of 64.000 Rwf per adult and per year and 45.000 Rwf is spent on food per adult and per year. This poverty line shows the destitute status, which is further accompanied by other hardships such as insufficient means of production or lack of access to land, health facilities, housing, clothing and school attendance for children.
- 76. Over the last two decades, poverty had two peaks in 1980 and in the 1990s. The proportion of poor households was 53 % in 1993. It sharply rose to 78% in 1994 and declined to settle at 60 % in 2001.
- 77. Poverty is more rampant in rural areas (68 %) than in towns (23 %).
- The Rwanda poverty profile shows that 96 % of poor food insecure people live in rural areas and 4 % in towns. Poverty and living standards depend to a large extent on land and livestock property. The average size of a farm in Kibungo Province is (1 ha), Umutara (0,99 Ha), Kigali Ngali (0,9 Ha), Gitarama (0,86 Ha). These have farms bigger than the national average.
- On the other hand, the surface area of form in the Provinces of Butare (0,36 Ha), Gikongoro (0,50 Ha), Kibuye (0,34 Ha), and Cyangugu (0,72 Ha) are below the national average. Further accompanied by other hardships such as insufficient means of production or lack of access to land, health facilities, housing, clothing and school attendance for children.
- 78. The level of poverty is reflected through the average size of farming land. This was 0.76 ha in 2000. However there is a big difference within the provinces .
- 79. Ownership of livestock, especially cattle, constitutes, just at the same level as ownership of land, an indicator of the standard of living. Associated with these two indicators is the characterization of poverty of households in six categories:
  - (i)The category of destitute is composed of people who must beg for their livelihood. They neither have land nor do they keep animal (Umutindi nyakujya);
  - (ii) The very poor but who can work in other peoples fields, they own no land or have very little land and do not keep animals (Umutindi);
  - (iii) The poor who has just enough land to produce food for their family and who have no savings whatsoever (Umukene);
  - (iv) The poor who has a bit more land, keeps a few animals and besides subsistence production have a little more income to satisfy a few other needs like school fees for children (Umukene wifashije);
  - (v) The rich in terms of food security have a large farm, rich soils, some animals, enough food and at times get access to paid employment (Umukungu);
  - (vi) The rich in terms of monetary revenue (Umukire) have land, animals and enough monetary revenues (paid employment, trade) to maintain a living standard that is above average.

The prosperity of this category of people often pushes them to migrate to urban centres.

- 80. The proportion between the six categories does not clearly appear in statistics. But it is estimated that half the grandees households do not possess animals and a third of farmers do not use manure.
- 81. Data on poverty according to different regions show a very big difference between Kigali city and other provinces. Food related poverty stands at 96 % in rural areas. The provinces of Gikongoro, Butare, Kigali-Ngali and Ruhengeri are relatively poorer-especially due to the high population density and heavy soil degradation.

# 3.2.2 Food and Nutrition situation

- 82. The analysis over time shows five major periods:
- (i) The food scarcity situation in the 40s and 50s forced the colonial administration to put in place administrative measures forcing people to plant non-seasonal food crops to combat frequent famines and food scarcity.
- (ii) The period between 1960 and 1980 did not experience any food crisis because of the continuation of the colonial coercive policy;
- (iii) In the middle of the 1980s the system reached its limit and production progressively went down; the critical point being in 1984 when a serious food crisis hit the country;
- (iv) A collapse in food and nutrition indicators was again observed in 1994;
- (v) A light improvement, compared to the 1990s, has been observed since the year 2000.
- 83. Compared to FAO standards of average food requirements per person per day Rwanda's agricultural production only partially covers needs: 87 % for calories, 70 % for proteins, and 22 % for lipids the nutritional deficit is a general one, for energy and proteins, the deficit in fats is chronically critical and has to be urgently addressed.
- 84. The food situation and the level of coverage of food needs, which are regularly established on a seasonal basis throughout the country, shows different forms of disparities. The seasonal variability is linked with the cycle of seasonal crops. The geographical variability shows evidently the most fragile provinces as far as the food situation is concerned.

Butare and Gikongoro variability are the most vulnerable Provinces in terms of food security. They often register poor rate of food availability as compared to other Provinces. Byumba and Kibungo are generally better covered. Disparities also exist at the level of agro-ecological zones and at the local and household levels. For instance, Bugesera as well as some areas in Kibungo and Umutara Region experience food shortages because of regular droughts. Some districts of Ruhengeri, Kibuye, Gisenyi experience food shortages because of population pressure, infertile land and high levels or soil erosion.

- 85. Data on the access to food of vulnerable households is not available and households headed by widows and children, people without land, chronically sick people, and people with HIV/AIDS). However, these categories merit special attention in addressing their of food security.
- 86. For the majority of Rwandans, daily food intake largely consists of bananas, roots and tubers (sweet potatoes, cassava, and Irish potatoes), which contribute 60 % of calories. Leguminous crops constitute the principle source of proteins and a considerable source of fats. Beans alone account for 40 % of protein source, peas, soybeans and groundnuts are present. The last two are the source of fat. Consumption of cereals (sorghum and maize) is poor despite the fact that they are energy generating foods. Cereals contribute only 15.4 % of the energy needs. Animal foods contribute little in the diet, they contribute just above 2% for calories, 6 % for proteins, and 40 % for fats (the average is as calculated for the years 2001-2003). Although, vitamins and mineral salts are important for a balanced diet, fruits and vegetables are only eaten in small quantities.

87. The nutritional situation is precarious if one considers the fact that the rate of infantile malnutrition (poor weight/underweight) recorded in 2002 was 24 %. Provinces with the higher rate of chronic malnutrition are Gikongoro (50 %), Kibuye and Butare (48 %) and Byumba (47 %).

Table n°1: Malnutrition rate for under five children

Residence/			Acute Malnutrition Height/age		Underweight Height/age	
Province						
	Severe	Moderate	Severe	Moderate	Severe	Moderate
Urban	11	28	2.5	6.4	2.1	15.2
Rural	20	45	1.7	6.8	5.8	25.9
Butare	22.5	48.2	1.8	7.9	8.3	31.5
Byumba	23.4	47.1	1.4	7.0	6.6	26.0
Cyangugu	19.1	39.9	1.5	7.7	4.6	25.5
Gikongoro	21.9	49.7	1.1	4.0	5.5	30.3
Gisenyi	17.7	42.0	2.4	7.1	3.4	18.5
Gitarama	19.3	42.4	1.0	5.3	5.2	25.2
Kibungo	19.2	44.3	2.0	8.9	5.7	27.7
Kibuye	19.9	48.0	1.7	8.2	5.3	26.0
Ville de Kigali	6.7	22.8	1.1	5.2	3.1	13.7
Kigali Rural	19.1	42.2	1.8	5.0	6.5	23.8
Ruhengeri	17.7	38.8	2.8	7.8	3.8	22.2
Umutara	18.5	39.8	1.4	6.7	5.3	22.1
Total	19.1	42.6	1.8	6.8	5.2	24.3

Source: EDS 2000

88. In order to fill the gap between production and needs, Rwanda and her partners have to resort to importation and food aid. In 2002, 16 % of the total expenditure on imports was on food, equivalent to 46 million US dollars, without counting food aid, which equally represented a significant amount.

Table n° 2: Total cover rate

	Local production	Imports	Total	Cover rate in
	contribution	contribution		%
Energy	2025	148	2173	103
Kcal/capita/day				
Proteins	44	3	47	80
g/p/j				
Lipids	10	6	16	40
g/p/d				

Source: Compilation GECAD from Minagri and BNR statistics.

# 3.2.3. Land and labour productivity

- 89. Based on the volume of animal and crop production in 2002 and corresponding prices, estimates for land and labour productivity were made in order to measure the current productivity performances.
- 90. The value of the production in 2002 was estimated to be equivalent to 328 Billion Rwf (572 Million USD). This corresponds to a labour productivity between 0.91 and 1.36 USD per day of labour and 400 USD per cultivated hectare. This corresponds more or less to the land area managed by a household, integrating with crops grown twice a year (1 ha managed on an area of about 0.75 ha for a household)

Tableau n° 3: Estimation of land and labour productivity in 2002 value

Value of production in Rwf 328,375,074,000 Rwf Value of production in USD 572,082,010 USD

Productivity Indicators	units	Number	Productivity per unit (Rwf)	Productivity per unit (USD)
Cultivated land per year	ha	1,400,000	234,554	408.63
Farms	Nb	1,400,000	234,554	408.63
Labour (2 actives/exploitation)	Nb	2,800,000	117,277	204.32
	HJ	420,000,000	782	1.36
Labour (3 actives/exploitation)	Nb	4,200,000	78,185	136.21
	HJ	630,000,000	521	0.91

## 3.2.4. The role of women in agriculture

- 91.In 1996 it was estimated that 34 % of households were female-headed, out of which 21 % were widows. The proportion of households headed by widows varies from Province to Province 13 % in Gikongoro and 28 % in Butare. These households constitute the population at high-risk poverty.
- 92. Even in other similar situations but where the number of female-headed households is lower, it has been proved that women play an important role in agricultural production activities.
- 93. The participation of the rwandese women in production and notably in agricultural production is something so common that any anomalies or challenges in that field usually go unnoticed. Nonetheless it would be good to illustrate this phenomenon with some figures from observations or research carried out in Africa or in the sub-region. A glimpse at their activities shows that:
- (i) Rural women work almost all the time without rest except for some hours of sleep.
- (ii) Women take part in all forms of activity whereas men do not do certain types of work reserved for women by nature (breastfeeding, childcare) or by tradition (grinding on the traditional grinding stone).
- 94. It appears that, although men and women work together in agricultural work in different regions, there is always some form of division of labour according to gender. For example men tend to tender cash crops such as tobacco, coffee, banana plantations and vegetables. Women tend to be more involved in food crops (cereals, tubers, beans, peas and maize).
- 95. Division of labour according to gender are also observed in respect to certain tasks. Most labour activities, such as sowing and weeding are jointly done by men and women while other operations (manuring, stocking) are mainly done by women.
- 96. Some socio-economic studies have suggested classification which distinguishes activities that are predominantly masculine and those that are predominantly feminine and the "mixed" type. In general non-productive activities and non-obligatory ones (visits, walks, rest, feast, mourning) are mixed, as they are practiced by both sexes in the same proportions. Activities that are productive but not compulsory (mainly commercial or paid in type) are masculine.
- 97. Boys more frequently attend school and have more responsibilities in looking father animals.

(more than 90 %) than the girls.

98. Studies carried out in the region show that women in age groups of 15-60 years spend one third of their time in agriculture, while men spend only 19.4 % in agriculture 54 % of their time in diverse leisure activities and on paid work against 18 % for women. Women use 29.8 % of their time on domestic activities while men spend only 4.1 % of their time.

#### 3.2.5. Peasants without land

- 99. People who have no land comprise 11.5 % of households in Rwanda according to EICV survey (2000-2001) with the Provinces of Cyangugu (13 %), Kigali Ngali (7,8 %) and Gisenyi (7,2 %) on top of the list.
- 100. The EICV found out that households without land and who have to rent it often get bad quality land. These families are often poor with no means to acquire farm inputs, which would help to produce enough food for them. They depend essentially on their production for their livelihood and have no other source of income (off-farm activities).
- 101. Therefore any shock on their production (e.g. climatic) throws them into a food insecurity situation.
- 102. On the other hand, it has been noted that farm workers alternatively go through periods with heavy activity- with a lot of activities timetables (for instance during tea harvest) and periods law activities and have no savings.
- 103. gain, off-farm employment is rare in the rural areas, which partially results from poor labour skills.

## 3.2.6 The youth and their future in agriculture

- 104. Even though there are no real figures available on the youth in rural areas, there are some indications that unemployment is increasing (small groups along the roads and some town and city suburbs; school drop outs and rural exodus).
- 105. Young orphans of war and AIDS orphans are heading households and have to take over the cultivation of their parents farms without having had any preparation for it. A synchronised action for professional training should identify what is feasible with the view to preparing the youth for a better form of agriculture or even other business opportunities.

# IV. SUB-SECTOR ANALYSIS

# 4.1. Natural resources management and water and soil conservation

# 4.1.1. Situation of the sub sector of natural resources management

- 106. The rwandese agricultural landscape faces a thorny problem of availability of arable land and the small size of the country (26.336 km2) does not offer any alternative to increase arable land. The surface of arable land is estimated at 1.4 million hectares (52 % of the total surface of the country).
- 107. In addition to the small size of the agricultural farms, crops are grown on steep slopes up to 80 %. The most marginal zones (steep slopes and poor fertility are occupied by less demanding crops generally cassava.

- 108. It is generally agreed that slopes of more than 5 % need erosion control measures. However, most of the cultivated land has steeper slopes and is not protected, according to the recommended control measures.
- 109. It is estimated that only 23.4 of land in the cultivated are is more or less free from risk of erosion, 37,5 % requires preparation before cultivations while 39.1 % % of the land has high risk of erosion.
- 110. It has been established that Rwanda is losing 1.4 Million tons of soil per year. This corresponds with a decline in the country's capacity to feed 40.000 people per year. The annual loss is estimated to be for organic matter (945.200 tons), nitrogen (41.210 tons) phosphorus (280 tons) and potassium (3055 tons). In some areas it can go up to 557 tons affected all crops. The Nyabarongo river carries 51 Kg/second of soil at Nyabarongo-Kigali; 44 Kg/second at Nyabarongo-Kanzenze, and 26 Kg/second at Akagera-Rusumo.
- 111. The climate is aggressive and capricious. On one hand it is characterised by strong precipitation in the mountainous areas resulting into heavy erosion and soil degradation. On the other hand, low altitude areas such as Imbo, Bugesera, Mayaga, Mutara experience erratic and low rainfalls.
- 112. Out of 165.000 hectares of marshlands, 93.754 hectares have been cultivated (57 % of the total surface area). Only 5000 hectares are developed and can be cultivated throughout the year. Other hectares are arbitrarily cultivated without any technical study by peasants grouped in organizations or by cooperative groups supported by local or foreign non-governmental organisations. Such developments risk causing ecological disequilibria in the fragile ecosystems.
- 113. Other general problems in terms of soil and water and management in Rwanda are the following:
  - ➤ Poor use of farmyard manure even though more than 50 % more or less raise cattle, the average number of cattle is small and cattle breeders practicing zero grazing are rare.
  - Agroforestry is not well developed- which explains lack of firewood and this results in people using farm residues for home use;

Erosion control actions are being applied but not sufficient not diversified and not well spread over all the zones needing erosion control. Erosion control is not yet perceived as a parameter for intensification of production.

#### 4.1.2. Constraints

- 114. The first constraint to improved soil and water management is the demographic pressure. It leads to: rapid decline in the size of farms; fallows disappear from the farming system, over cultivation, lack of replenishment of organic matter, cultivation on excessively steep slopes without any erosion control measures.
- 115. The second constraint is connected to soil quality and their advanced degree of degradation. Soils are very poor and have low organic matter and low fertility potential except in lowlands and volcanic soils. Some hillsides are already completely degraded by erosion and production is impossible without fertility restoration.

Agroforestry is less developed yet it can be adapted to all zones and on all slopes while playing a multiple role in soil conservation and biomass production.

- 116. The third constraint lies in maintaining inappropriate agricultural techniques and low interest of farmers to apply the recommended measures..
- 117. The fourth constraint is linked to institutional aspects. Services in charge of water and soil conservation (WSC) are not efficient. Very few marshlands have been developed and given

enough infrastructures for water management. The law on WSC has never been applied. The results from research are meagre. Upland irrigation is unknown in Rwanda.

#### 4.1.3. Potentialities

118. Potentialities are linked to a number of favourable factors: a big agro-ecological variability; existence of 165.000 hectares of marshland of which 100.000 hectares can be developed and make agricultural intensification possible; water resources are abundant and can be used for irrigation purposes on hills; rainfall is relatively abundant.

## 4.2. Crop production and commodity chains

## 4.2.1 Situation of the sub-sector of crop production commodity chains

- 119. Agricultural crop production in Rwanda can be grouped in three categories: food crops (leguminous, cereals, roots and tubers, banana); and the traditional cash crops (coffee, tea, pyrethrum). And the new cash or export crops(fruits and vegetables flowers, spices etc.)
- 120. Food crops occupy 92 % of the total cultivated land; while coffee and tea occupy respectively 6,3 and I,6 % of the total cultivated land. The average cultivated land in the 1997-2003 period was 1,428,033 hectares. This surface area is divided as follows: cereals 18 %, leguminous crops 26 %, bananas 26 % roots and tubers 28 %. In 2002 the cultivated surface was 74 % of the available land while fallow land/grazing land, woodland and others occupied respectively 14%, 7 %, 5 %. The Agricultural farming typology shows that 17 % of the farms are I e s s t h a n 0,25 ha; 26 % are between 0,25 ha 0,5 ha; 29 % between 0,5 ha alma, and 28 % are more than 1ha.
- 121. With regard to cereals, the commodities Maize and rice need a special attention.

# 122. The commodity chain of Maize

Is currently under full reorganization and will undergo a profound change, also due to increased involvement of the private sector in its production, transformation and commercialisation. This is best illustrated by the case of the company MINIMEX, which has started the construction of factory for maize flow processing factory with the capacity of 300t/day i.e. a capacity of 60.000 tonnes in 200 days a year. This is equivalent to 75 % of the current total national production and a partnership with farmers organizations for partnership with farmers organizations for the production of the raw material (maize)has already been established. The maize crops possesses the advantage of being grown in all agro-ecological zones of the country, with a higher potential in the provinces of Ruhengeri, Gisenyi and in developed marshland. Maize has a very big potential for intensification fertilizes application.

123. **Rice** is a cereal with growing importance in Rwanda and the year 2004 was dedicated to it worldwide. In 2003 rice was grown on 6.020 ha with a total production of 27.866kg paddy rice, equivalent to 18.112 kg of polished rice

Rice production is conducted in rice schemes in the provinces of Cyangugu, Butare, Gitarama, Kigali-Ngali, Umutara and Kibungo. The study for the marshlands utilization master plan identified 48.000ha of marshlands, which can be used for rice production. The national rice production covered 28 % of rice needs in 2001, 50 % of needs in 2002 and 60% of need in 2003. Importation of rice costs the country an average of 305 Billion Rwf annually, which can be greatly reduced if the national production capacity is increased. MINAGRI plans in this regard to increase the area of development works marchlands development works will be through the Rural Sector Support Project (RSSP). Research activities by ISAR have shown results of up to 10t/ha under controlled plots, compared to 5 t/ha on farmers plots.

- 124. The traditional export crops (coffee, tea, pyrethrum) are particularly important to the nation (foreign exchange earners) and to the farmers (monetary income).
- 125. Coffee is grown by 400.000 farmers in 60 Districts, which were identified as the most suitable for the crop in the context of regional specialization and intensification of coffee growing. The number of associations working with OCIR-CAFÉ is 80. In the 2000-2003 period coffee exports were worth 19 million dollars on average per year, being about 28 % of the total export earnings. Coffee production rose up to the middle of 1980s with a maximum recorded in 1986. Production began to fall until 1998 and started to come up again in 1999. The level of production recorded until 01/09/2004 is 25.000 tons. In order to improve the quality of coffee, which had deteriorated (48 % coffee in 1986 against 2.4 % in 1995), the Government has undertaken a promotion programme of washing stations (13 in 2003, with an anticipated raise to 20 in 2004). The fully washed coffee production is currently 700 tons in 2004 and standard coffee stands at 35 % of the national coffee production.
- 126. Tea constitutes the second traditional export crop. Tea production covers an area of 12.800 ha, in industrial blocks and village smallholdings. It is processed in 10 factories: Mulindi, Pfunda, Rubaya, Nyabihu, Mata, Kitabi, Gisovu, Shagasha, Gisakura and the private factory of SORWATHE.
- 127. In 2002, tea was the major export earner (USD 27 millions, representing 39 % of export earnings). Prices fluctuate enormously on the world market; it rose from 0,70 cents per kilo in 1995 to 1.40 USD per kilo in 2001 and 1.75 USD in 2004. Production varies from 13.000 tons to 17.000 tons in normal conditions and income from tea is around 20 million to 27 millions USD.
- 128. Following the recent implementation of price differentiation and improvement in tea transport, OCIR-THE has recorded considerable increase in the rwandese tea quality which is now ranked first in Mombasa.
- 129. Prospects for tea growing development are based on the privatisation of 8 factors of OCIRTHE by 2005.
- 130. Pyrethrum growing has created a new window of opportunity for the national economy, especially since the privatisation of its factory, which went to SOPYRWA in 1999. Production of fresh flowers has reached 4.000 tons per annum and income to the 25.000 planters is in the range of 200 million rwandese francs; export earnings have reached 2.7 Million USD per season. With the installation of the 500 Kg/day capacity refinery in October 2004, a new window of opportunity was created and this will enable supplying the markets in the sub-region.
- 131. The use of fertilizers: Rwandese Agriculture is characterized by a very low level of inputs use, especially mineral fertilizers. The national fertilizers consumption per cultivated hectare is estimated at less than 4kg. This is clearly less than the averages (from 9 to 11kg/ha during last year) for Sub-Saharan Africa in general, which has still the weakest fertilizers utilisation level as compared to any other region all over the world. The analysis of the trends of the last ten years shows that the quantities of imported fertilizers have rarely exceeded 8,000 tons per year. Fertilizers' import has been liberalized in 1999 and private companies have begun to be more interested in this sector. The Government has, in this regard, taken measures that were to favour the involvement of the private sector by abolishing free fertilizers distributions as well as ICHA and customs fees for entry of fertilizers (May 2000).
- 132. The Government has also put in place, under funding from the World Bank, a credit line for fertilizer import and under subsidized interest rates (9% instead of 16%) within the Rural Agricultural Markets Development Project. According to the final report of the Project on 28 June 2004, an amount of US \$ 1,28 millions was used (and fully reimbursed) with credits provided through commercial Banks, that is, 64% of the total amount that had been budgeted for.

- 133. Among the factors that limit the use of fertilizers, the following can be cited (i) lack of enough skills in the use of fertilizers; (ii) high cost of fertilizers; (III) inadequate supply and demand which is difficult to be assessed and (iv) lack of credits to buy fertilizers.
- 134. The advocated measures to make the potential use of fertilizers meet with the effective demand are (i) the increase of the rate of fertilizers' adoption by improving the research/development and extension; (ii) the improvement of farmers' awareness in the fertilizers' potential and the way they are used and (iii) the improvement of supply so that fertilizers can be available any time and anywhere they are needed.
- 135. As far as producers' organization is concerned, there is existence, at all levels, of a number of Associations, groups, federations and cooperatives, which intervene at different steps of agricultural commodity chains. Most of Associations and federations deal with production of food crops and vegetables, but since some years, a certain change within Associations of tea and coffee farmers can be noticed. Tea farmers' Associations are grouped at a national level within the Rwanda Federation of Tea Farmers' Associations (FERWATHE). Different Rice Cooperatives are also grouped at a national level within the Rwanda Rice Cooperatives Union called UCORIRWA.
- 136. Rwanda farmers and cattle breeders are, in addition, grouped since 1989 in the association IMBARAGA that grouped 65.520 members in 2003 from Butare, Byumba, Cyangugu, Gikongoro, Gisenyi and Ruhengeri Provinces. The ambition of this association is to be present in all the provinces of the country. It is a national organization, which embarked on defending farmers' rights as well as serving them. One of the realizations which has to be supported is the organization of farmers within federations according to commodity chains..
- 137. Major problems faced by Farmers' Associations are (i) the low level of members' organization and participation, (ii) weak capacities especially in planning monitoring and negotiation, (iii) lack of human, material and financial resources.
- 138. The national agricultural policy puts particular emphasis on the existence of a political and strong will to restore **Research** and to restructure the Agricultural Research Institute of Rwanda (ISAR). It also underlines the important challenge of the translation and transmission of research results to the beneficiaries. The new mission of ISAR which is defined within the Strategic Plan, published in 2002 seeks to involve, more strongly, the rural beneficiaries communities as well as other partners in the dissemination of adapted innovations, so as to promote high levels of productivity of agriculture that is oriented towards market, which contributes to the ultimate goal of improving the population's incomes, and food security thereby preserving the environment. The definite goal is to move quickly towards a system of Research that is demand-based.
- 139. Regarding Extension, the National Agricultural Policy underlines the need to make the participatory approach a routine, in order to allow all the concerned actors to be associated in identification of extension needs and themes. Such a strategic orientation represents a good innovation in terms of approach since it takes place within a conducive general context that has been induced through the adoption, by the Government of Rwanda, of the program of good governance, putting special emphasis on the concepts of popular participation as well as giving them a sense of responsibility and ownership
- 140. The agricultural extension has been, for a long time, considered as the primary responsibility of public services. It has been, on the whole, characterized by directive and administrative approaches, with a little impact as far as the adaptation of extended technologies and agricultural transformation are concerned.

- 141. But we also notice, since some years ago, changes in approach which are positive signs indicating a real will for change: it is, first and foremost, taking charge of some aspects of extension activities by farmers' associations. This is the case in some rice schemes and tea plantations, where farmers' associations are responsible for paying employees in charge of extension. It is also the case of the Association IMBARAGA, which has already launched a training program for farmers, which serve as an intermediary for extension services. This appropriation of extension by farmers' Associations is a source of efficiency and sustainability. It has to be supported.
- 142. Worth mentioning is also the increasing implication of the private sector in the agricultural production (Rice, coffee, tea, maize, new export cultures) and its partnership with public services and farmers' Associations in the promotion of commodity chains that are oriented towards the market, the distribution of fertilizers as well as modern techniques of production. This partnership constitutes an opportunity for agricultural development and must be supported.

#### 4.2.2 Constraints

- 143. The major constraints that affect development food crops growing can be grouped into different categories:
  - (i) Constraints linked to production systems are due to predominance in subsistence farming and poor market integration; extreme land fragmentation, over cultivation without restoration of mineral elements washed away by erosion; very low farm output compared with the potential because of poor use of manure and fertilisers or other farm inputs; poor capacity in terms of plant protection;
  - (ii) Constraints linked to support services can be observed at the level of poor use of fertilisers because of ignorance about their effects by majority of peasant farmers and poor availability of these fertilisers (distribution circuits) as well as poor accessibility (purchasing power); sale of improved seeds does not satisfy the demand; a disorganised system of selling fertilisers; inadequate relation between research and extension services leading to poor technology transfer to farmers and difficulties in accessing loans;
  - (iii) Constraints linked to markets arise because of the fact that there is no added value to agricultural production due to lack of resources, infrastructure and transformation technology, conservation and conditioning; farming techniques which do not guarantee quality and security; poor marketing capacity amongst farmers organisations; etc...
- 144. Among constraints behind the fall in coffee production are: reduction in productivity, a large proportion of old coffee trees, poor productive potential of traditional varieties, inefficiency in extension services, poor capacity among farmers organisations, low coffee prices at the international markets and lack of motivation amongst the farmers.
- 145. As for the low quality, it is due to the shortage of washing stations and inefficient systems of quality control, poor conditions of coffee trees, insufficient price differentiation in relation to quality and excessive competition among factories and exporters, which affects quality.
- 146. Among the constraints affecting tea development are:
  - (i) poor capacity of tea producer organisations:
  - (ii) poor output of tea leaves especially among peasant farmers small holdings (7 tons/ha average for OCIR-THE against 15 tons/ha for SORWATHE);
  - (iii) high costs of energy and transport of exports.

# 4.2.3 Opportunities

- 147. Despite the numerous constraints, the crop protection sub-sector has a number of opportunities:
  - (i) political will to modernise and transform the agricultural sector as clearly expressed in the 2020 Vision, the Poverty Reduction Programme, the National Agriculture Policy;
  - (ii) MINAGRI leadership and committed and qualified staff;
  - (iii) involvement of private investors in the agricultural sector;
  - (iv) dynamism in farmers self-organisation and their good will in taking charge of development of the agricultural sector;
  - (v) the last tenure act law which will limit land fragmentation and encourage land regrouping with a view to utilising the land resource better;
  - (vi) future establishment of promotion tools (Agricultural Credit and Guarantee Fund) and research prospects (rice, maize, wheat, tea, coffee, in vitro tissue culture etc...).

# 4.3. Animal production and commodity chains.

#### 4.3.1 Situation of the livestock sub sector

- 148. The livestock sector contributes about 8.8 % of GDP. The major animals raised in Rwanda are cows (991,697) goats (1.270,973), sheep (371,766), pigs (211,918), chicken (2,482,124) and rabbits (498,401).
- 149. The three provinces having the largest number of cattle are Umutara, Gitarama and Kigali. The first province in characterised by the extensive type of animal husbandry, whereas the other two are more or less oriented towards milk production. Raising of goats is more concentrated in the provinces of Kigali, Byumba and Kibuye. Pigs are raised mainly in the provinces of Gitarama and Butare. Bee-keeping is wide-spread in the provinces of Kibungo, Byumba and Gitarama.
- 150. The production systems are essentially of the traditional type, with very little improved techniques utilized. Intensive production is practiced for diary production, with genetic improvement activities, around Kigali City as well in the one of Gishwati, where great progress has been achieved regarding genetic improvement.
- 151. Annual animal production is estimated at 97,981 litres of milk, 39,126 tons of meat, 2,432 tons of eggs, 7,612 tons of fish and 1,499 tons of hides and skins. This does not satisfy the needs and requirements of the population. Consumption in Rwanda is 12 litres of milk and 4.8 Kg of meat per person per year, while FAO recommends respectively 220 litres and 50 Kg per person per year.

#### 4.3.2. Constraints in the Livestock Sub-Sector

- 152. Major constraints for the livestock development in Rwanda are numerous:
  - (i) Deficiency in animal feed both in quality and quantity. This arises from poor and narrow pastures, water shortage, poor quality of commercialised feeds and limited use of agricultural by-products;
  - (ii) Animal diseases, especially epidemic diseases which regularly affect animals;
  - (iii) Poorly performing local breeds with low productivity:
  - (iv) Poor diversification: livestock is essentially centred on cows which have a long reproductive cycle and which are not accessible for the majority of farmers;
  - (v) Inappropriate veterinary legislation: laws regarding animal health are outdated whereas laws on different other aspects such as hygiene, quality control and veterinary profession do not exist;

- (vi) Poor veterinary services with few qualified cadres and poor means of responding to farmers needs,
- (vii) Low level of investment in Livestock development which results into the absence of necessary infrastructure especially for transformation of animal products;
- (viii) Inaccessibility to loans by small livestock farmers which limits their opportunities and possibilities of adopting modern technology in animal production;
- (ix) Weaknesses in farmers organizations, which do not have sufficient human and material resources:
- (x) Weak link between research and extension services. Most of the research is carried out in research stations and have no impact on the farmer.

#### 4.3.3. Potentialities

153. (i) First of all, a high demand from producers which can be explained by the long livestock keeping tradition and the need for restocking following the large number of animals decimated the large number of animals decimated during the war, and the strong tendency of livestock keepers to apply genetic improvement actions, including modern artificial insemination techniques.

There are currently a certain number of opportunities, which could contribute to livestock development.

- (ii)The decentralisation policy will bring services closer to the people, notably at the level of the sector, which is at the base of development. Veterinary services should penetrate into this logic particularly at the level of administrative sectors where animal production constitutes a major economic activity;
- (iii)Land law which is about to be adopted will give to farmers more land security enhance the livestock of investments:
- (iv) Drafts of revision of the law on animal health and proposals for new laws to cover other aspects, which are not covered. This legislation will lead to better organisation within the veterinary profession and will hence contribute to sub-sector development.
- (v) Strengthening the veterinary profession through draft laws for better organisation of the profession so as to play a more marked role in animal production development.
- (vi) Existence of financial facilities to modern farmers through some institutions such as the Rwandese Development Bank (BRD) and projects like PADEBL essentially for the importation of improved breeds.
- (vii) Establishment of Agricultural Credit and Guarantee Fund

# 4.4. Farmers Organisations and Service to producers.

- 154. The grassroots farmer organisations (Urugaga Imbaraga) and animal productions farmers in Rwanda) contribute, through extension work, to the strengthening of production structures and marketing, though still meagrely. Agricultural services personnel should give more priority to supporting decentralised collective units (through CDC) and farmers organisations and ensure a follow up of actions and projects under them. They must assist them in the preparation and negotiations of their projects and in their local development plans. Training of leaders of NGO's and peasant organisations is important for the future.
- 155. The Agro-business is a new concept in developing countries. It targets the integration of agricultural sector development within an approach of market where the demand condition the productivity and the competitiveness of the agricultural sector. Instead of concentrating investment efforts on the food supply, the actual debate puts a special emphasis on skills and control of markets.
- 156. Therefore, Agro-business puts together all the factors of agricultural markets in order to stimulate the production so as to respond to consumers' demand. It particularly deals with the agro-industry sector in the broad sense (collection, transformation, preserving, conditioning and marketing of products from agricultural origin) and the sector of agricultural inputs.

- 157. The Government of Rwanda is engaged in promoting the Agro-business through (i) commodity chains development, (ii) transformation and competitiveness of agricultural products to facilitate access to markets.
- 158. The Rwandan agriculture is less integrated into markets. As it has already been underlined in sections related to agricultural and animal production, activities supporting the production are hampered by a number of weaknesses both upstream (proximity services such as inputs supply, credit, organization and training of the rural population )and downstream (commercialisation, preserving and transformation of products).
- 159. The Commodity chain approach, constitutes one of the Government's essential axes of intervention methodology and is based on the reinforcement of professionalism, specialisation and regionalisation of agriculture. Research constitutes an important support since it has to intervene at all stages of the commodity chain. The promotion of export products as well as the increasing involvement of the private sector have particular importance.

# 4.5. Agribusiness, promotion of commodity chains, competitiveness, processing and access to markets (agribusiness)

## 4.5.1 Situation in the area of agro-business and promotion of commodity chains.

- 160. Competitiveness and integration of agricultural products into domestic and foreign markets are more and more determined by the capacity of producing countries to satisfy the requirements of consumers in terms of quality and reliability of the food produced or transformed. If agriculture in Rwanda does not attain the standards of quality and reliability required internationally, it will miss the opportunity offered by globalisation. The projected rapid agricultural growth for poverty reduction will depend to a large extent on the professionalisation of rwandese agriculture and its rapid integration into the world market.
- 161. Domestically, poor food quality and reliability have severe consequences in terms of diseases and malnutrition, especially in young children. It hampers the achievement of the food security and nutritional programmes objectives.
- 162. Rwanda is importing food to ensure national food security. Imported food may be of poor quality, which may compromise the nutritional situation. Imports may also enter into competition with domestic production.
- 163. By aiming at quality, quantity and value of agricultural products, it will be possible to rapidly ensure rapid growth through internal and external market development.
- 164. For a rapid agricultural growth to take place, there are three conditions:
  - (i) Technological changes which will increase animal and plant production by applying modern techniques;
  - (ii) Low transaction costs as a result of good road conditions, telecommunication and market development;
  - (iii) Export products, which will allow for production to increase more rapidly than internal demand.

# 4.5.2 Constraints in the area of agro-business and promotion of commodity chains.

- 165. There are still following constraints to be removed:
  - Rwandese agriculture is not yet market-oriented

- Production and productivity levels are still low;
- Commodity chains actors are not organized into inter-professional groupings
- The fact that Rwanda is landlocked makes the cost of transport for export high (between Kigali, Mombassa and Dar Es-Salaam , the transport cost varies for example from US\$3,000 and US \$ 4,000 per container of 40 feet
- Lack of cold chains
- The limited number of sufficient export cargo which makes necessary for some products to wait for up to 5 days in stores and this has a negative impact on the products' quality due to the fact that some products have to be delivered on the market within 24 hours;
- The unavailability of basic agricultural equipment both in quality and quantity;
- The inadequacy of appropriate technologies and products which do not meet standards and norms required for export market, therefore limited by the existence of non-tariff barriers
- A low level of technical skills for most of producers and actors in the agricultural commodity chains:
- Lack of entrepreneurs with sufficient financial capacities and determination to venture in Agro-business projects.

## 4.5.3. Potentialities in the area of agribusiness and promotion of commodity chains

166. Despite these constraints, there are development opportunities if there was implementation of sub-sector strategies aiming at rapid growth, better allocation and appropriate management of the existing natural resources.

167. Among the major opportunities are:

- Priority accorded by the Government of Rwanda on the development of agriculture as expressed in the national plan for the development of agriculture and in the poverty reduction strategy;
- Creation by the Government of Rwanda of a good environment for competitiveness through the legal and statutory framework that promote the development of the private sector, liberalisation of the economy, improvement in fiscal system, privatisation of public enterprises- notably those concerned with water, energy, telecommunication and privatisation of agricultural units (tea, coffee, pyrethrum);
- Strong will to promote partnerships between the public and private sector, in particular for the promotion of exports;
- Good effort by the Government to conquer foreign markets for agribusiness:
- Support by donors in the development of agriculture as an engine for growth and poverty reduction;
- Favourable climatic conditions for intensification and diversification of agricultural products;
- Growing consciousness of the importance of quality control in traditional and non traditional exports;
- An emerging interest for agribusiness amongst some associations, cooperatives or private investors;
- Abundant and young labour force.

# 4.6. Support infrastructure

168. The development and modernization of agriculture in Rwanda faces problems of lack of support infrastructure for production, transformation and marketing.

169. This infrastructure would largely create off-farm employment through labour intensive work, agro-based industries, marketing and distribution services and types of connected jobs generated by the development of agribusiness and the promotion of modern farms;

170. Analysis of the current situation has exposed various problems in the sub-sectors.

- 171. In the area of livestock support infrastructure, the following constraints were identified:
  - On the whole, water points for cattle are insufficient compared to number of animals. In Umutara Province, which is the principal animal production zone, there are only 57 of them. The situation is even worse in regions that are vulnerable to droughts like Bugesera and Gako.
  - There are only two big abattoirs in Kigali: SABAN in Nyabugogo and SATRA in Kicukiro. In each province and some districts, there are slaughter houses but these do not fulfil the hygienic conditions required besides poor slaughter infrastructure in general. Also environmental impact is not taken into account.
  - Para veterinary services such as dispensaries and pharmacies are insufficient. This
    means that small and average farmers who cannot afford specialised services for
    their sick animals meet problems.
  - Other infrastructures that are not sufficient are quarantine posts, veterinary laboratories and spraying corridors.
  - The existing dairies with an annual production of 112.000 tons represents only 30% of requirements and this is insufficient. The only dairies available are: Nyabisindu, Inyange, Rubirizi, Gishwati and Nyagatare. Dairies at Gishwati and Nyagatare are not functional because they have not been rehabilitated.
  - A well structured collection network lacks for milk. It is a major constraint in the development of the dairy sector because it is a handicap to local production flow and does not encourage intensification. This problem seriously compromises the reliability of the quality of milk and the health of its consumers especially young children.
- 172. The area of support infrastructure for transformation, packing and storing of agricultural products faces numerous constraints. Except for the traditional export crops: coffee, tea, pyrethrum- for which there are agro-industrial units, often old and inadequate, there is lack of reequipment programmes. The oil sector used to have an oil production for groundnuts but it no longer functions. The European Union Programme for food security tried to put in place small mills and oil extracting plants for the transformation of oleaginous grains in different parts of the country but this distribution is still marginal
  - A major hindrance for investment in agro-industry is the absence of cold room facilities between production and transformation sites, packing or expedition for export.
  - Thus, the MAGERWA transit centre in Kigali has only two 20 feet cold containers at the airport with a capacity of 18 m³ or ten tons. One of them can cool at 0° 20° C while the other cools at 20° 15° C.
  - Refrigerator trucks are almost unknown in Rwanda, but they are indispensable in improving transport conditions for food products and flowers for export;
  - Small and medium enterprises requirements for exports have already been identified, but the low volume of exports, the high cost and irregularity of air transport are major constraints.
- 173. As far as transport infrastructure is concerned, the following constraints have been observed:
  - The principal road network, generally composed of earthen roads, is 1023 Km long of which 229 Km are in good condition (22 %), 440 Km in reasonable condition (43 %), 241 Km in bad condition (24 %) and 113 Km in very bad condition (11 %).
  - The road conditions in the rural areas are deplorable. This makes the marketing of agricultural products difficult and expensive.
  - The transport of goods and passengers are performed by more or less specialised companies, but these are rare in the countryside far from urban centres.
  - Connection by land with neighbouring countries and sea ports meets problems of high transport costs for different reasons (Bad road conditions between Kigali and Mombasa –

- 1750 Km in approximately 5 days; bureaucracy at the borders; long waiting periods in Mombasa, formalities of centralised export at MAGERWA; lack of and necessary equipment and installations at MAGERWA; bad condition of Rusumo road at the Tanzanian railway terminus; air connection with European countries is dependent on few Airlines with Nairobi as the connecting point).
- Insufficiency of Rwandan exporters leads to the fact that products may represent only 2 to 4 tons per flight, depending on the availability of space. In actual practice, priority is often given to Kenyan exporters. Hence Rwanda's perishable products have to wait. The result is decline in quality, which often leads to partial refusal or total rejection of the merchandise in Europe.
- 174. The tea sector is experiencing specific additional constraints.
  - Since certain agricultural cooperatives have for some time now been responsible for the maintenance of the roads that link their plantations to the tea factories, the roads are almost impassable, since the farmers lack the means to ensure proper road maintenance. The tea factories thus affected are Cyohoha, Rukeri, Mata and Nshili-Kivu factories.
  - Funding for the construction of Nshili-Kivu tea factory is available, but construction of a 50-km stretch of road is required to ensure access to the factory, as well as electricity for the functioning of the factories.
  - Drying machines have been using wood, which has now become a rare product. This
    hampers the drying capacity of the factories, hence limiting the production capacity of tea
    growers.
- 175. Similarly, the coffee washing stations have other specific constraints. Before the 1994 War and Genocide, there were only 2 such washing stations; Kora in Kayove Gisenyi and Masaka, in Rural Kigali. There were also some small manual machines that OCIR CAFÉ had distributed. In the last two years, 20 washing stations were constructed, and next year 15 others will be constructed. On the whole, it is anticipated that about 100 stations will be set up. However, the required infrastructure such as feeder roads and water sources are lacking.
- 176. Concerning the pyrethrum factory, the dryers (at Kora, Kabatwa, Butaka and Musanze) that prepare the pyrethrum leaves for processing in the pyrethrum factory use wood. However, the issue of deforestation has become a nationwide preoccupation, and the roads that link the dryers to the factory are practically impassable.

#### 4.7. Legal and Regulatory Framework

177. Concerning legislative and institutional aspects, MINAGRI has to ensure the following: (a) ensure an improved co-ordination between MINAGRI and other ministries involved in the agricultural sector; (b) ensure the promotion of grassroots organizations, with a comprehensive rural supervisory/training scheme that would be in direct contact with the grassroots community/peasants; (c) promote professional organizations; (d) promote women's organizations and ensure capacity building/strengthening of their members; (e) ensure capacity building/strengthening of service providers (agencies, research and popularisation bodies, private sector, NGOs, etc.); (f) promote organizations that develop networks; (g) facilitate the organizing and functioning of inter-professions; (h) arbitrate in conflicts between organizations

178. In addition, the government is in the process of establishing an environment that favours private investment. Such an action requires some legislative reforms some of which have already been carried out. What is remaining is to establish a more favourable legal framework so as to increase economic activity and private investment. This may be achieved mostly through the following measures:

- The strengthening of MINAGRI and other related agencies, through the creation and implementation of agencies that could function privately, in the same way as service providers;
- Capacity building at district level, mostly through matching of their resources with monitoring of their responsibilities, as well as the instalment of simple systems to facilitate movement of funds and to manage information flow between the ministry and the districts (i.e. follow-up and monitoring, transparency and accountability, training):
- Reforming of the financial sector with the aim of restoring financial stability, to encourage commercial banks to fund agro-processing, to mobilize long-term (and more flexible) funding for the agricultural sector, increase small businesses' access to funding (consideration of the gender factor), and to reduce the risk incurred by banks in establishing a guarantee fund;
- Reforming of commercial and business laws, as well as the establishment of a legal framework that would act as an incentive for private investment;
- · Clarification of laws relating to agribusiness;
- Modification of policies and tariffs relating to taxes, customs duties and other levies.
- Establishment of structures and mechanisms for co-ordination between various partners in the agricultural sector as well as their networks; namely MINAGRI, the producers, local traders, the local authorities, UNR research centres, ISAR, NGOs, philanthropic and religious associations, so that each partner may play his/her role efficiently, in the interests of competitivity;
- Continuation of the policy of privatisation.

#### 179. Constraints faced by the Ministry in this field may be grouped as follows:

- Monopolistic activity of the state which manifests itself mostly through (a) deeply
  entrenched bureaucracy (b) insufficient dialogue between the public and private sector
  and (c) too few investments within the private sector.
- An obsolete legal framework, with mostly (a) the absence of a jurisdiction adapted to the agricultural sector (b) a lack of safety mechanisms adapted to current conditions being faced by owners of small businesses; (c) poorly organized business networks.
- An insufficiently developed financial system that is not well adapted to the requirements of
  economic operators in the agricultural domain; a lack of financial institutions that
  specifically deal in funding of the rural sector; an extremely high interest rate (16%); the
  agricultural sector being a high-risk one, commercial banks are reluctant to give funding.
  In Rwanda, the percentage of private loans that are granted so as to enhance agricultural
  development does not go beyond 2% of the total amount loaned out by local commercial
  banks.

#### 4.8. Financing, coordination and monitoring evaluation of the agricultural sector

180. The success of the agricultural sector development strategies depends on the capacity of the Government to mobilize the necessary funds to finance investments in this sector. These funds are from the State's budget, investors, or donors. For the latter, their funds can be either donations, or loans. The financing propositions of these strategies have to take into account the different macroeconomic constraints, which are related to the increase of expenses and of the currency in use. Besides, in accordance with the different economic theories, the optimal level of expenses depends on the relation between the growth, the interests rates and the yield related to these expenses. Within the scope of macroeconomic policy, the increase of expenses that are related to the new investments does not have to be inflationary. If financing funds come from credits (bank system or donors), one has to make sure that the engaged expenditures lead to a net rate of yield that exceeds the interest rates, that is, resources costs. This aspect is of great importance because since the liberalisation of prices that was introduced in 1998, the Rwandan currency authority is particularly preoccupied by the rates levels. This preoccupation is based on the leverage effect hypothesis under which a high rate level discourages loans demand. On the other side, in order to maintain a strong RWF, the NBR gives prefers the restrictive policy within

which the high interest rate is one of the privileged instruments. This problem of high interest rate constitutes an obstacle for private investments.

- 181. The agricultural sector is quite huge, and includes several stakeholders, as well as several sectors. It is therefore important to develop a coordination and consultation framework that may stimulate synergies in planning for, and managing the available resources.
- 182. With regards to the National Investment Strategy, the general orientation is to rise in vestment levels from 18% of GDP during 2001 to 20 22% of GDP in 2010, so as to achieve an annual growth rate of at least 7%, required to achieve the objectives of the National Poverty Reduction Strategy. The required level of public investment would then grow from 51 billion RWF during 2002 to 127 billion RWF in 2010.
- 183. The level of investment in the agricultural sector should grow from 8.3 billion Francs during 2002 to 14.7 billion Francs then 2006, then gradually the level of 10.4 billion Francs during 2010. It is expected that from 2007 onwards, the private sector shall be the driving force behind economic growth, and shall contribute in a consistent manner to the growth process.
- 184. If one compares these requirements to the reality, the current degree of investment within this sector falls short of the required level. It is 84% of amount investment advocated by NIS in 2002; 72% of that advocated in 2003, and 79% of that advocated in 2004. The portion of the national budget allocated to agricultural investments fee from 5.8% during 2001 to approximately 3% during 2003 and 2004.
- 185. In 2003, the main donors in the sector were: the World Bank (27% of total funding); the ADB (19%); IFAD (15%); the USA (10%); the Netherlands (6%); Belgium (5%); and China (2%). Total pledges amount to 195 billion Francs for the funding of 72 projects and programs, 29 of which are big projects funded by the above-mentioned donors, and amounting to 84% of the overall funding. 186. The contribution of public financing in the sector is difficult to precise, given the inadequate classification of the officially used nomenclature. This does not take into consideration the projects or programs that are monitored outside MINAGRI but that have agricultural components such as PDRCIU, CDF, PDL-HIMO, and PADDEP all which under the tutelle of Minaloc.
- 187. In terms of disbursement performances, it is noticed that there is an absorption rate, which is relatively low (65 % of the investment budget in 2003) for the projects under MINAGRI, compared to other ministries (100 % Mineduc: 98% Minisante).
- 188. The Rural Sector Support Project has particularly very low disbursement rates. The disbursement rate was only 21 % by end June 2004, 32 months after its effectiveness and 18 months before the closure of its first phase. Weaknesses are observed both in the conception and in the project implementation.
- 189. It is worth mentioning that the Government has put in place a mechanism of decentralized financing (the Common Development Fund CDF), whose performances are handicapped by the limited capacity of districts to formulate projects and supervise their implementation.
- 190. Other weaknesses noticed at the following levels have been identified:
- The bank financing to the agricultural sector only represents 1,92 % of the total credits allocated to the country's economy in 2003. The institutions of micro finance are less developed and are not enough and their direct contribution to agriculture is still very marginal. The only institutions, which operate considerably in giving credits to agriculture, are the BRD and the Union of Peoples Banks (UBPR). The contribution of the BRD to finance the sector rose from 156 Million Rwf to 913 Million Rwf in 2003, that is respectively 8,6% and 27% of the total amount of the credit portfolio. The UBPR is progressively playing a more and more important role extension of microcredits . From 29,273 approved loans in 2002, loans of less than 20,000Rwf represented 8% and

395 had amounts from 20,000 to 100,000Rwf. In spite of its recent efforts, the supply is still under the needs of rural financial services.

- Concerning communication system, monitoring and evaluation, there is lack of a computerized system which is easily accessible to key actors such as MINAGRI, MINECOFIN and MINALOC to efficiently monitor and coordinate interventions within the agriculture sector.
- The monitoring and evaluation system in particular is not systematized, and only takes place during the exercises of projects formulation or evaluation.
- There is a crucial lack of modern communication infrastructures (ICT) at the decentralized level especially at the level of districts, which have to play a central role in planning and executing agricultural development programs.
- The sharing of roles between the central Government, provinces and the districts require a coordination mechanism as well as material and human resources in order to encourage a larger participation of the population in the agricultural development.
- The coordination of donors intervening in the sector is still weak. The rural development cluster created in 2002 is more a discussion framework than an effective tool of dialogue and mobilisation of a long term partnership that is necessary for development of agriculture sector.
- The coordination of donors intervening in the sector is still weak. The rural development cluster created in 2002 is more of a discussion forum than an effective tool of dialogue and mobilization of a long-term partnership that is necessary for development of the agricultural sector.

#### V. ANALYSIS OF CONSULTATIONS AT GRASSROOTS LEVEL

#### 5.1. Objectives, Methodology and general organisation of grassroots of consultations

- 191. Grassroots consultations aim at achieving four objectives: (i) information, sensitisation and mobilization of beneficiaries compared with the new national agricultural policy; (ii) the compendium for the beneficiaries' points of view and contributions; (iii) making accountable the beneficiaries and their communities in the choice of priority activities and their Implementation (iv) the process ownership including monitoring and evaluation.
- 192. The beneficiaries' consultations in 106 districts of the country took place in three phases in accordance with the methodology described in appendix 3. The pilot phase, relating to participatory workshops in the 10 districts of Kigali-Ngali, took place in July 2004. The second phase has covered the Districts in Kibuye and Gikongoro Provinces (August 2004). For the two other Provinces, Umutara and Kibungo, the district workshops took place in September 2004. The last step will be about the 7 other Provinces (October-November 2004). Thus, all provincial restitutions will have been finalized before the end of the year 2004.
- 193. During the 5 workshops held so far, the participation of populations and local authorities was active. Such enthusiasm reflects the importance of agriculture in rural economy. The workshops enabled the MINAGRI to re-establish communication with the base. The workshops have inevitably created expectations in local authorities that the actions will follows the words. The effective carrying out of the Strategic Plan is therefore very important to meet those expectations. The results of consultations presented here show the constraints and opportunities identified in the Provinces of Kigali-Ngali, Gikongoro and Kibuye. On this basis, participants in workshops suggested solution ways, priority fields, as well as proposals of concrete actions to complete those already included in the Community Development Plans.

#### 5.2. Constraints and problems raised

194. The outline in annex 1 presents, in the vocabulary of participants in the workshops, the problems mentioned during the workshops. They are regrouped in seven fields: natural resources, vegetable productions, animal production, producers' capacities, support advice to producers, agricultural credit and institutional environment. The totality of these mentioned problems presents an integrated analysis of the problems of rural production systems, of daily

problems which producers must cope with, weaknesses of proximity services, and general problems the linked with institutional environment.

The problems mentioned are about the causes of generalized poverty in provinces, food insecurity for rural households and low income for producers. They explain the low levels of production and productivity for vegetable and animal productions, as well as the fundamental reasons for the small orientation of production systems to the markets.

# 5.3. Priority commodities

195. During the workshops, participants deeply discussed about the commodities in their districts in order to choose the most useful ones. Thus, each district retained priority commodities (annex 2). The box in annex 2 shows the justification of choices of commodities for the three provinces.

196. As indicated by the choices of districts, the retained fields are not necessarily the more important ones in terms of area or production, not even those relating to the soils' potentialities. Pending that a deeper analysis relating to the potentialities map be carried out in 2005, it clearly comes out that the existence of the markets for local products orientate too much the choices of priority commodities. For the commodities other than traditional crops for export, the urban demand and the proximity of transformation units are very important. The choices of commodities show that it is by conviction that producers maintain themselves in the logic of subsistence agriculture. In the event conductive conditions are met, populations develop commercial orientation for their agricultural production systems.

197. Justifications of choices for potato, wheat, climbing beans, milk and goat and pork meat suggest that the promotion and the development of commodity chains require the creation of favourable environment, whose elements are the following: availability of agricultural credit (to invest), availability of seeds, inputs and support-advice (to obtain good outputs) and the markets and prices which are relatively sure.

# 5.4. Priority axes for the transformation of agriculture at local level.

198. During provincial consultations, problems were presented in form of a problem tree. Such a form of presentation enabled to make the outline of agricultural development objectives for Provinces. Provincial syntheses present first outlines of provincial community programmes for agricultural development.

199. From grassroots consultations, it comes out that in fact the fundamental issues for the local agricultural development are at two levels:

- (i) intensification and diversification of production systems and
- (ii) quality proximity services to producers.

200. For the first level, priority is to be given to support measures, which enable producers to better manage their farms and to be in charge of themselves in charge. Finally, producers themselves must manage natural resources intensify and diversify their production systems and penetrate the markets.

Priority axes are the promotion of the farmers' organizations and the information and the training of producers in order to build their professional capacities. This is mostly technical and organizational support that enables producers to find solutions to the problems, which arise at the level of their agricultural farms and in their fields and pastures.

201. Those priority axes require, at a second level, a system for providing quality and proximity services to producers. And as it is shown by the mentioned problems, this is where the low level fits in the present situation. The planning and the coordination of agricultural development activities are poor; there is a lack of financial and human resources; appropriate technologies are

not enough developed, accessible, diffused and adopted; micro finance services do not meet the needs; and diverse agricultural inputs are not available.

202. Most of current interventions are isolated or punctual and do not lead to genuine transformation of agriculture. During the workshops, participants gave examples of interventions which have not produced the expected impact: (i) small impact of developments of hillsides and marshlands because of the lack of accompanying measures (organization of producers, agricultural intensification); (ii) disappointing results of restocking and genetic improvement of livestock, because of problems linked to the maintenance of animals and the in accessibility of feed for livestock to small and middle agro-breeders; (iii) Non-functionality of fish ponds, due to lake of supervision and organization among producers.

203. he complexity of agricultural development requires a coherent set of interventions and collaboration between the actors and stakeholders in the agricultural sector.

204. The analysis of the results from the participatory workshops shows that the populations call out to all stakeholders in order to create agricultural innovation and service systems to producers who associate support to the organization of producers, the search for adapted technologies, technical support-advice, micro-finance, supply of inputs, information about the markets and the prices for agricultural products. This method is to be realized within the context of the State's decentralization and disengagement, policies.

# 5.5. Towards the Implementation of districts agricultural development plans

205. During the workshops, participants identified many projects and concrete actions, some of which were already in the PDC. Other proposals have been added after analysis problems and opportunities. The lists of the chosen actions are long and contain actions relating to developments of side basins and marshes, integrated management of soils, agricultural intensification and diversification, perfect command of cultural techniques, the fight against erosion, storage, preservation and transformation of agricultural products, infrastructures, livestock restocking, the organization and the training of producers, the intensification of supervision, etc.

206. The total cost for the Provinces' agricultural development proposal varies between 5 and 10 billion Rwf, i.e. between 10 and 20 Million US Dollars. By the year 2010, this represents an amount of about an amount from 1.5 to 3 Million USD per year and per province. So far, such amounts have never been spent for local agricultural development. However, they are not unrealistic, because they perfectly reflect the breadth of the challenges to be taken up, notably as regards the management of side basins, the management of soils' fertility and rural infrastructures. For the period 2005-2008, it is important that decentralized entities select more priority actions and reinforce their technical organizational and financial absorption capacities.

207. One of the main conclusions which come out from basic consultations is that transformation of agriculture requires first institutional reorganizations, reinforcement of the producers' organizational and technical capacities and appropriate funding modalities, in order to find appropriate answers to areas of weakness in the local institutional environment and to the weaknesses of the services of support-advice to producers. Otherwise, there are high risks that projects and solutions provided for will only be very partly carried out at the base, as it was the case during the last decades.

# PART TWO: STRATEGIES, PRIORITY PROGRAMMES AND INTERACTION WITH SECTORS FOR SUPPORT TO AGRICULTURAL DEVELOPMENT.

## VI. STRATEGIC PLAN FOR AGRICULTURAL TRANSFORMATION (SPAT)

## 6.1. Challenges

208. The main challenges of the agricultural sector are the following: (i) transformation of subsistence agriculture into commercial agriculture with all its involvements in terms of institutional, social changes of behaviour and distribution of roles and responsibilities between different stakeholders; (ii) to ensure food and food security in the country; (iii) improvement of the farmers' income and monetisation of agricultural economy; (iv) creation of extra agricultural jobs enabling to notably reduce the agricultural population; (v) to contribute to the improvement of the commercial balance, the domestic product and savings; (vi) to reverse the soils' degradation process and to manage the property soil in a sustainable manner.

#### 6.2. Mission of the Strategic Plan

209. The mission of the PASTA is derived from the vision 2020 and the objectives it assigns to the rural sector in the fight against poverty and improvement of living conditions for poor rural populations as well as their integration in an economic environment, which can bring then prosperity and assurances of good life for future generations. The mission of the PASTA is «to ensure to farmers' populations a prosperous life and improved living conditions in modernised and organized agriculture».

## 6.3. Objectives of the SPAT

- 210. The Strategic Plan fits in the guiding in the driving line of the Strategic Framework for Poverty Reduction. The overall objective of the agricultural sector corresponds with the one of the National Agricultural Policy (NAP), more specifically the overall objective of the SPAT is to contribute in a sustainable manner to poverty reduction and to support Rwanda's economic growth through increasing productivities of production factors, maximal valorisation of productions, diversification of income opportunities, preservation and maintenance of natural and environmental resources. Growth sources of the agricultural sector will be of two types: those which are linked to a potential of export in the fields and the which are linked to the development of the internal market, mainly the cereal fields (rice, maize), milk, meat and vegetable crops.
- 211. Six specific objectives are assigned to the sector: (i) to ensure a sufficient offer of agricultural products and food security to the populations; (ii) to increase levels and to diversify the households' income sources; (iii) to maintain, preserve and improve the management of water resources and soils; (iv) to contribute to macro-economic balances and to growth; (v) to contribute to the resolution of social problems notably linked to gender, youth, farmers without land and other vulnerable groups as well as to AIDS; (vi) to transform the mission and the role of different actors (Administration, producers, civil society and private sector) so that adapt themselves to the new-vision.
- 212. For some aspects, documents of vision 2020 as well as the document for the National Strategy for Poverty Reduction are still more explicit in terms of quantified objectives. Within the perspective of making Rwanda a country with medium income, from now to the year 2020, the GDP per capita will have to go from about 230 USD in 2002 to 800-1000 USD (estimated in 2000 constant terms). This involves an annual medium growth rate of the real GDP included between 8% and 9% over the period. Agriculture would intervene in that growth at the rate of 6.3% per year. The agriculture GDP would have to go from 310.292 Milliard Rwf in 2000 to 460.706 Milliard Rwf in 2005; 646.066 Milliard Rwf in 2010; 824.562 Milliard Rwf in 2015 and 1052.373 Milliards Rwf in 2020. This requires transforming 50% of agricultural farms in farms of modern type, to treble the land productivity and to multiply the work productivity by 4 or 5. The part of the

agricultural GDP in the total GDP would go from more than 45% to less than 30% between 2004 and 2020.

213. These objectives have been defined with the preoccupation to meet expectation of rural populations both at the level of what is new in adopted strategies and proposed actions and in their implementation modalities.

## 6.4. Guiding principles

214. The agricultural strategy is defined in accordance with guiding principles and expressed big orientations of development (i) in Vision 2020 notably as regards contribution of the agricultural sector to the expectation of global objectives; (ii) in the Strategic Framework for Poverty Reduction and in (iii) the Paper for the National Agricultural Policy.

215. The SPAT has acquired the following specific guiding principles as regards its strategic approach: (i) it is first a participatory pro-poor strategy. This option is based on the fact that the majority of the population are rural, live of agriculture and because it is in that sector that there are the majority of poor. It makes intervene beneficiaries and their communities at all levels. (ii) The strategy is progressive, flexible and dynamic. We must be conscious that the new voluntaristic vision of agricultural development puts the population in new destinies and that risks can be associated with that development. The strategy must be conceived so as to make necessary adjustments and take into account the moment's changing circumstances. (iii) The strategy is based on the demand and the incentives to producers' («demand driven»)0 It is for taking into account the producers' free and negotiated choices; public powers intervening in the orientation through the setting up of appropriate incentive mechanisms. (iv) The strategy is sensitive to the issues of gender, youth, environment and AIDS. Whatever is the phase, the moment and the space in which you are, those dimensions intervene in the planning and the carrying out of actions. (v) The strategy will be based on the principle that the development of agriculture is mainly the fact of the private sector and producers who composed it. But in the present situation, the role of the State, which is decisive, will be refocused in order to reinforce ownership and assumption of responsibility by the farmers communities and organizations and private operators as well as partnership between the State and those other actors. (vi) It will apply the principle of subsidiarity so that the intervention of the public service, which will be decisive at the beginning, will have to progressively give up to communities and the private sector, responsibilities that go to them. (vii) The allocation of the State's financial resources will be made in priority towards the more competitive actions and productions.

216. The SPAT's guiding principles are established duly taking into account the following priority general orientations: (i) political and economic good governance; (ii) decentralization; (iii) economic transformation of the rural sector; (iv) the development of the service sector and manufacturing industry; (v) the development of human resources; (vi) the development and the promotion of the private; (vii) economic integration at regional and international level. In particular, vision 2020 considers that by 2020, the modernized agricultural sector would only occupy 50% of the country's population.

#### 6.5. Strategic axes

217. The following strategic Axes of the SPAT were established based on the National Agricultural Policy's orientations relating to the modernization of agriculture through horizontal actions linked on one hand to increase in crop productivity and on the other hand through reinforcement of producers' professionalisation and specialization of agriculture through vertical actions of the lopment. They are connected to the main lines of Vision 2020 and those for the Strategic Framework for Poverty Reduction.

218. They take into account the need of innovating in the nature of relations established between different actors and in particular at the level of public services' restructuring so that they meet requirements of the new policy, participatory approach, actors' capacity building and of the partners' role to development in the adoption and the carrying out of the enlarged programme approach.

219. The following strategic main lines have been retained: (i) diversification and intensification of crop, animal and aquatic production; (ii) diversification of income sources and jobs for rural populations; (iii) linking production with the market and integration of agricultural economy in national and regional economy; (iv) sustainable management of natural resources and in particular that of water and soils; (v) Organization, mobilizations and building capacities for producers and professional organizations; (vi) Building capacities for service providers, privatisation and promotion of the private sector; (vii) Creation of a favourable institutional framework for the professionalisation of producers and the transformation of the Rwandese agriculture; (viii) Creation of an environment favourable to productive investment and to the development of enterprise and employment in agribusiness; (ix) refocusing of Menagerie's role and restructuring of its actions towards the sector programme approach within the framework of decentralization; (x) promotion of the gender approach and reduction of vulnerability for disadvantaged groups.

# 6.5.1. Diversification and intensification of crop, animal and aquatic production.

220. Present cultivation practices participate in aggravating the levels of productivity in agriculture and producers' strategies rarely integrate the internal external markets' evolution, except in the case of coffee, tea and some crops such as potato, rice, maize and passion fruit for example and to a small extent milk and meat.

221. The present sub-regional and international economic context is meant to become more and more open. Agriculture of traditional type will not be able to put up with competition on regional markets, which will develop without any doubt at the level of the neighbouring countries' productions. It will be still less able to position itself on the international market, which is one of the country's objectives. It is therefore appropriate to adopt a voluntaristic approach in order to avoid the risk of aggravating that Rwanda's agriculture becomes withdrawn and which could start more its present low productivity. It is therefore necessary to act on all factors likely to generate quality transformations at the level of the production apparatus, regarding the behaviour of all actors and regarding the socio-economic at the economic environment.

# 6.5.2. Diversification sources of income and employment for rural populations

222. The objective of reducing the agricultural population by 50% by 2020 involves a huge effort for the agricultural sector to generate extra agricultural activities from a production, which must be diversified and competitive enough to put up with the constraints of the transports of the transport cost and transformation.

223. The promotion of non-agricultural job opportunities in particular in the fields of HIMO and agribusiness and the development of other income sources notably through craft industry, microtransformation, etc. will enable to valorise the labour factor already in excess in the country and to generate new opportunities for non-agricultural income.

# 6.5.3. Productions between production and the market and integration of agricultural economy in the national and regional economy.

224. The fight against poverty is carried out through the increase of rural populations' income. For that reason, it is necessary to evolve towards an agriculture whose production must no more be only designed for self-consumption, but more and more turned towards the market (local,

national, regional and international). For this reason, the resolution of constraints downstream of production must be a priority for the PSTA. The choice of productions to be developed must be based on the demand, on the products' comparative advantages, and on the search of appropriate solutions to meat downstream constraints (preservations, transformation, marketing).

225. The priority orientation of incentives and resources towards the commodity chain and agribusiness should be therefore being carried out in favour of opening up agriculture for the internal as well as the external markets.

## 6.5.4. Sustainable management of natural resources particularly water and soils.

226.Rwanda can no longer allow the destruction of its essential soil and water resources without taking corrective measures. The future generations will depend on actions taken in the first place by village communities themselves because it is their heritage and their means for survival. The task is enormous but it is vital. The government should mobilize all the energies to eliminate the present psychological barriers to development and to the generalization and anti erosion actions and integrate the producers in the process of soil conservation and rehabilitation of their fertility. This process will be supported by major scale activities financial by partners of development partners who are very conscious of the seriousness of the problem and invest financial resource including those which can be used to change the attitude of the peasant society with regard to this question.

# 6.5.5. Organization; mobilization, strengthening capacities of producers and professional organizations.

227. This is a control axis of SPAT It is based on the principle of making the producers and their organizations responsible for the reforms, which will be put in place in the agricultural sector aim s at the centralization of the public services and pus all the producers and their organizations in the development process. However, it opens up opportunities and new perspectives, and this new context introduces new requirements to be fulfilled; without which they not operate. It is for this reason the support of capacities in these organizations constitutes an essential element for the success of SPAT.

228.Undertaking will require commitment and important mobilization of beneficiaries taking into account the fact that she actions should be taken starting from the needs shown by the produces.

# 6.5.6. Strengthening capacities in providers of services, privatisation and promotion the private sector.

229.In the above mentioned areas, the concept of Minagri towards the private sector will be based essentially on non equivocal definition of the necessity for the later to undertake their responsibilities in a revised institutional and legal framework taking into account new realities. In this regard the initiative of MINAGRI will be proactive. It will require attentiveness in the first instance and sensitive to problems of the private partners and ready to assist them to solve the problems which are institutional in the nature but without distorting the market.

# 6.5.7. Creation of institutional framework conducive for the professionalisation of producers and transformation of Rwandan agriculture.

230. The government has shown its commitment in professionalisation of producers its adoption of a clear policy of decentralization and a set of institutional legal and regulatory frameworks. Implementation of this policy should be perfectly reflected in SPAT, which will support in the first instance the rural organizations, which are responsible for the development process. This institutional framework should address the need for profit, to put in place appropriate means of incentives to create a coordinated framework and communication with federations, unions and

other professional organizations in order to attract the critical mass that these instruments offer for professionalisation of the trade.

# 6.5.8. Creation of conducive environment for productive investment and development of entrepreneurship and employment in agro-business

- 231. The are four categories of priority productive investments
  - (i) small scale individual initiatives
  - (ii) collective initiatives by the beneficiaries (OPS or the CDCs).
  - (iii) mall and medium size investments and
  - (iv) big investments.
- 232. Different fools will be put in place to offer a set of possibilities to this diversity of demand. Activities related to the use and sustainable management of land, agricultural transformation and commercialisation will be first put in place.
- 233. The improvement of the environment will be carried out along with the revision of the laws regulation, adequate edition of application texts putting in place the Agricultural Guarantee and Credit Fund, creation of a specialized department for agro-business questions and negotiation of a specific project for conserve water and soil conservation.

# 6.5.9. Review of the role of MINAGRI and restructuring of its actions through a sector program approach within the decentralization framework.

- 234.Decentralization, disengagement of government from productive sectors and the promotion of diversified interventions in the agricultural sector should cause MINAGRI to restructure its functions in a radical manner as well as in the manner in which it conducts its business.
- 235.An important change should take place in the type of relation and connections to participants and in its approach among the communities that it serves and in other actions, which contribute to the growth of the agricultural sector. It should change the way it carries its mission, mainly in the advices it gives and participative research, in programming and in Coordination of its activities. In this context, Information and communication Technology (I.CT) should be put in place to support the pilot functions of the process, but equally to put in place a new form of communication, internal as well as external in MINAGRI.
- 236. The participation of beneficiaries in all the stages of operation of the process will be extended to analysis mechanisms, approval of demands and financial management. The experience of CDF and of MINAGRI projects in financial decentralization will constitute a base to consolidate and to extend its approach in all methods of financing.

# 6.5.10. Promotion of gender approach and reduction of vulnerability of the disadvantaged groups.

237.Gender, agricultural production nutrition and the protection of vulnerable groups are intimately linked. In fact, the woman (and often the youth) is regularly required to accomplish a number of tasks of the agriculture sector (marshland crops, small scale animal husbandry, and agriculture in general if field works are considered). Furthermore, extension systems adapted to Rwanda for many years have not taken the woman into account as a beneficiary and as an actor in agricultural extension. Potentialities however exist for an effective integration of gender in the process of agricultural development.

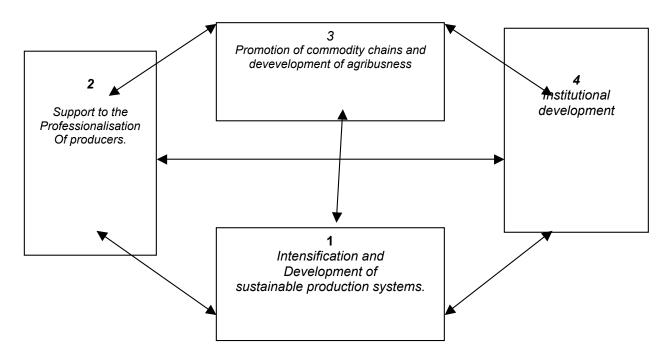
#### VII. PRIORITY PROGRAMMES AND EXPECTED OUTPUTS

238. The SPAT comprises of 4 principal programs with 17 of subprograms. Whose expected results appear in the quantified objectives of the Plan of Action (Appendix I), as well as in the attached annex (Appedix IX).

239. The structuring of these programs responds to the type "program approach" where all the activities of the sub programs should follow services of common objectives with resources and complementary means.

240. This grouping does not follow an ideal structure and overlaps between these programs are inevitable. However the later are considered to be liaison elements to assure complementation instead of duplication sources or conflicts.

## Interrelations between the 4 programmes of the SPAT.



#### 7.1. Intensification and development of sustainable production systems

- 241. This program comprises five sub programs: conservation of water and soils and sustainable management of natural resources
  - (i) Integration of agriculture and animal husbandry and management of soil fertility.
  - (ii) Use of marshland and irrigation development.
  - (iii) Supply of agriculture inputs.
  - (iv) Food security and risk management and marshlands vulnerability in the framework of quantitative objectives, which are presented in the action, plan in the annex.

# 7.1.1. Sustainable management of natural resources and conservation of water and of soils.

242. The diagnosis of the sector has shown different level or degradation of process on land and its harmful impact that it can bring to the present and future generation. Based on the principle that the protection of the land heritage is the responsibility of those using it, the communities

should be sufficiently conscious to be in charge of this problem and reverse the passive attitude prevailing at present as regards the necessity to put in place anti erosion activities. It has equally been shown that a large part of the problems lies on exposed land, being partially or progressively exploited by the users themselves, adopting adequate cultural methods like ploughing and curved ridges, construction of earth banks with plants, mulching, etc. It is evident that systematic exploitation of land and anti erosion measure is an enormous venture requiring financing which is impossible to mobilize.

- 243. The strategy for this sub sector will therefore be based on.
- > the reinforcement of capacities of local governments in the area of land management
- > sensitisation of communities to change attitude regarding Erosion control measures
- > inclusion of erosion control programs in district development plans which can be supported financially by the CDF.
- Advising when required
- The financing of heavy works by the state, which assist the communities.
- > Revision of legislative framework and regulations in relation with land issues
- Management of soil fertility
- 244. Vision 2020 has fixed the following specific objectives for the period 2002 to 2020
  - o 90% of land will be protected against erosion
  - o (II)° 10000 ha of land on hills will be irrigated
  - o 40000 ha of marsh land will be developed
  - o 140 valley dams and water reservoirs on hillsides will be constructed.
- 245. The action which will be carried out by SPAT are embedded in this long term objective. The period 2005 2008 will be dedicated mainly to the following:
- Revision of legal framework relating to conservation of water and soil (revision of the law of 30 the March 1982 and its application).
- > Updating the action plan and the conservation of water and soils (IFS/CES).
- Launching of pilot operations of integrated management initiatives of catchments areas in the provinces, which have placed this activity as a priority in their local programs. Mobilization of funds is being carried out for this operation in five provinces. These pilot actions will lead to the elaboration of a national program of protection and management of water catchment areas.
- > Support of ISAR activities in the management of soil fertility
- Putting in place of sensitising and training groups of villagers on food production and conservation.
- > Launch priority actions of protection of resources in forest zones and model fauna.
- Taking into account the general character, the government will follow up the efforts of mobilizing efforts of financial resources mainly those of GEF for actions to prevent degradation and management of international water resources

# 7.1.2. Development of integrated livestock systems, agro-sylvo-pastoral production and promotion of specialized intensive animal husbandry

246. The development of an integrated livestock within agriculture is the principal option that is offered to reverse the current process of soil fertility degradation and to reduce the disequilibria of the population nutrition. But another option, that is complementary to the first one, consists of encouraging moderns livestock keepers, specialized in intensive breeding techniques, in order to promote milk and meat( production in large quantities (cattle raising, feedlots, intensive breeding of pigs, goats, sheep, etc...), eggs and many other animal productions. This option calls for a more intensive action in terms of modern breeding inputs supply (cattle food, veterinary products, supply in improved breeds of cattle) as well as improvement of breeding training services (prevention and veterinary inspection services etc..)

- 247. The analysis of constraints shows that a set of actions is necessary to achieve this result.
- 248. The actions are to be carried out by MINAGRI as well as other stockholders. They involve actions of reform and security of land tenure. The removal of psychological constraints on livestock requires pasture production on small holding through introduction of small ruminants, the constraint of purchasing big animals by credit facilities (important follow up), complementarity between agricultural activities in the hillsides and management of marshland. The protection of sensitive forest zones and marshland and their importance to the development of extra agricultural activities mainly in the park zones where special programs will be carried out.
- 249. The basic strategy of this program is based on (i) the principle that any agricultural farm has to possess some animals whose nature and number will vary according to the size of the farm and the production system. These animals can be pigs, small ruminants and poultry. This principle implies a strong action of restocking that is accompanied with genetic, technical, and sanitary improvements that are necessary for expected quick transformation and investments as well as enough incentives to attract the grassroots to efficiently participate (ii) the promotion of conservation, transformation and commercialisation of animal products (iii) diversification which will allow the utilization of all potentialities of different provinces for one or another type of production and which will concern cattle, small ruminants, pig raising, poultry keeping, rabbit breeding, beekeeping and fish farming in accordance with the demands expressed by the population within the CDPs. The organization of support-advice at the level of each sector and district should meet the precise demands for all these production activities.
- 250. Taking into account the nutritional needs, emphasis will be put on milk production which will constitute a specific commodity chain approach.
- 251. Meat production will be developed through small animals development (goats, pigs and sheep) and promotion of improved village poultry through improved races and financial services.
- 252. As far as fisheries and fish farming is concerned, the Government has already approved a big project for the development of these two activities and which is taken into account in the elaboration of the action plan of the SPAT.
- 253. The projects in place which will continue out in the next three years will be revised to adopt them to new trends of PNA and SPAT. In particular this concerns;
- > National Poultry Hatchery of Rubilizi
- > Support to the development of cattle and milk production
- Pan African program of epizooties control
- National veterinary laboratory of Rubilizi
- > National Artificial insemination centre
- Restocking project
- 254. Project PAIGELAC The newly planned Priority actions will allow to reduce some constraints of the sub sector, putting in place necessary conditions and costing animal husbandry bases which contribute to the general objectives of the sector, namely: elimination of food deficit, rehabilitation of soil fertility and increase of producers revenues.

255. The following actions are proposed to this effect;

- > Follow up of ADB Project and development of milk and meat production.
- > Restructuring the artificial insemination centre of putting in place a genetic improvement project and develop agriculture.
- Support restocking programmes services and appropriate incitements
- Advisory services in the improvement of feeding animals (production of fodder crops, creation of pastures)

> Reinforcement of veterinary services in cooperation with the private sector and putting in place a monitoring project and intervention in the area of animal health.

# 7.1.3. Marshland development

- 256. The country has a master plan for marshlands development , protection of water catchments and soil conservation, which was carried out basing on hydrology, pedology, environment agro economic and sociology studies. An aptitude and land utilization plan has equally been elaborated . Basing of typology of swamps cleared , two master plans have equally been elaborated; these are the master plan for marshlands development and master plan for catchments protection and conservation of soils. The two plans are complementary and should be integrated.
- 257. The choice of marshlands to development and to manage should take into account the orientations given by the master plan for marshlands development and for protection of catchments areas.
- 258. The strategy marshlands to development of swamps will be based on the following elements:
- The choice of marshland to manage should take into account the orientation of the master plan for management of swamps, protection of catchments areas, and conservation of soils.
- Before any development, before any big marshland development feasibility studies and a detailed pre-project including an Environment impact Assessment, will be an obligatory requirement
- The state will finance development works as they are very costly works.
- The development of a marshland will go hand in hand with the management of the catchment areas in which it lies.
- > The elaboration of the specific legislative framework for utilization of marshlands.
- 259. The actions which will be carried out during the period 2005 2008 are the follows as:
- > Elaborate a specific land law for swampy areas
- Security of more by those wishing to develop swamps.
- ➤ Develop and add value to the swamps basing on the existing master plan; The 2005 2008 program will cover 5000 ha.
- Support the agricultural organizations and undertake the maintenance costs of infrastructures.

## 7.1.4 Irrigation development

- 260. Rwanda has abundant water resources that can irrigate areas. Gravity land irrigation is the only one known in Rwanda and can not be practiced elsewhere outside the swamps. Much remains to be done for irrigation on the hills. Taking into account the important potential which small land users represent, MINAGRI intends to develop a program for development of small scale irrigation parallel to pilot actions of developing hilly areas basins mentioned above and to reinforce the sufficiency of existing large and medium size perimeters;
- 261. The strategy in small the area of small –scale irrigation will be based on the following principles;
- > Support will be given for development of small scale pilot irrigation community projects identified in the local development plans;
- The contribution of the state will cover the construction of hydro infrastructure putting emphasis on construction of upland water retention

  The contribution of beneficiaries should be mobilized
- The following actions well be carried out;

- > Research and extension of methods to efficiently manage water resources in agriculture.
- Participatory identification of deficit sites water and study of water needs
- Support to elaborate irrigation and drainage studies
- > Study and put in place a priority development plan for the irrigation of Bugesera and Rusumo
- Study the possibilities of pumping water from rivers, lakes and underground layer.

#### 7.1.5. Supply and utilization of agricultural inputs.

- 263. Given that the quantity of fertilizers used is very little (4Kg per ha per year) due to problems of distribution, it is necessary to put in place appropriate mechanisms to support the private sector to raise by 25% each year the quantities of fertilizers imported so as to bring it to 8000 tones per annum and to at least 15000 to 20000 tones by the year 2008.
- 264. Alongside the increase in supplying fertilizers, research in participative popularisation should be undertaken in a way to ensure the distribution of intensive methods associated with the use of organic manure ,mineral fertilizers and soil improvement chemicals(e.g. lime application).
- 265. In the same way, depending on available resources, the government will support the follow up and speeding up, importation of improved breeds as well as improving artificial insemination methods and cross breeding;
- 266. The multiplication of seeds and of plants will equally be supported through support given to professional organizations to develop private plant nurseries.
- 267. The agricultural mechanisation component will be developed in order to increase the productivity of production factors, particularly that of labour. This evolution is a must in the sense that it has to meet both the progressive agricultural labour force, on one hand, and the increase of food demand on the other hand.
- 268. To achieve such a goal, the SPAT plans, among its activities, to put in place a section of testing and dissemination of modern or improved agricultural equipment which will cover a wide variety of needs such as improved farm tools and implements, milking machines, bicycle pumps, tractors, combined harvesters, different equipments for the processing of agricultural and milk products, etc.

#### 7.1.6. Food security, management of risks and of vulnerability.

- 269. The country ha an agricultural potential, enough to ensure sufficient food availability in quantity and quality, for the present and future population. The strategy to ensure food security is based on:
  - (i) Putting in places productivity improvement programs for the traditional foods crops and intensification of production for strategic products such as rice, maize, Irish potatoes, milk and meat.
  - (ii) Targeting of zones and vulnerable groups taking into account the disparities existing in the social groups and in regions and eventual shocks, which affect them.
- 270. The objectives in this area as determined from the objectives of vision 2020 summarized in the table below:

Table 4. Nutritional objectives set up in vision 2020

Availability	2010	Gap to objective 2010 (%)	2020	Gap to Objective 2020 (%)
Energy in kcal/person/day	2183	9	3236	47
Protein In g/person/day	58	5	108	43
Lipids/person/ day	18		90	

#### 271. Three objectives will be pursued in this regard:

- Reduce food and nutritional deficits, mostly in lipids and balance the food situation targeting mostly the development of oil yielding types, cereals as well as milk and meat;
- Reduce vulnerability in food deficit zones and in population groups affected taking into account specific problems in these zone(mainly draught and acidity of soils), and population (rural households without land or having small pieces or land for crops, women and children managing households, the resettled persons, the demobilized, etc.
- Create employment mostly using the HIMO approach (Labour Intensive Works). They should target the forest persons as well as the unemployed and include a training component in skills in order to increase their professional capacity. Support to the professionalisation of producers

#### 272. The retained priority actions are the following

- > Putting in place a special food security programmer (PSSA).
- tracking system for agricultural production (mostly cereals and legumes)
- > Put in place an information system on markets
- put in place an information system on food security and agriculture and rapid alertness (SNIAR)
- close follow up of projects in other sectors in favour of special groups (youth without employment and demobilized soldiers) to ensure coherence with agriculture

# 7.2. Support to professionalisation of producers

- 273. This programme of support of organization capacities and t to the professionalisation of producers) concerns:
- (i)The promotion of farmers organizations and the reinforcement of producers capacities
- (ii) Restructuring of proximity services to producers, rural innovation, research for development, participatory
- Rural financial systems and the development of agricultural credit
- (iii)Rural infrastructure supporting producers
- 274. The requirements of SPAT to transform traditional agriculture and turn it towards the market calls for training of producers to acquire a notion of accounts, management of agricultural operations technology and profit.

## 7.2.1. Promotion of farmers organisations and strengthening of producers capacities

275. The NAP and SPAT put the peasants and their rural enterprises at the centre of their preoccupation and are based on the conviction that effective transformation of Rwandan agriculture should be based on social capital of the rural areas and it should give value to the most important resource of the sector which is the producers and their organizations. Participative

workshops have revealed that each district has tens if not hundreds of village organizations. The village organizations are increasing and turning professional at the level of sectors districts and provinces. It is mostly in the Northern provinces that the level of village organizations takes a large part. Some unions and federations have existed for longer them 10 years, indicating structural stability in rural zones and continuity in the management. MINAGRI expects to profit from the dynamic existing movement and is promoting organization of agro-livestock keepers and associations.

- 276. The SPAT plans technical support, logistics and finance to OP, mostly in the provinces where rural population is still relatively weak. It concerns mainly the provinces of Kigali –Ngali, Umutara, Kibungo, Kibuye and Gikongoro.
- 277. Considering the very important role of women in agriculture, MINAGRI has objectives for actions of agricultural development benefiting both women and men. For the unions IMBARAGA and INGABO, operating in 7 provinces of the country the representation of women is between 40 and 60% of their members, This situation opens door for effective achievement of this objective.
- 278. MINAGRI will actively support formation of base organizations and federations of OP. This strategy is particularly an indication in the areas where efficient intervention requires constitution of critical mass. Such is the case to be faced mainly to answer the urgent question of rehabilitation and extension of anti erosion plans and family operations on sloppy basins, management of swamps and river beds; supply of farm inputs, technical training, commercialisation of agricultural products.
- 279. The SPAT will equally support the participation of associations of economic interest around economic groups organized in, around commodity chain inter professional networks and putting producers together water other professionals in the channel being considered. This strategy important for the development of new commodity chains in general, and for the rationalization of the made of management of collective farms (tea, rice, coffee etc.) and the development of commodity chains for new crops, in particular.
- 280. For the period 2005 2008, MINAGRI recommends an intensive dialogue with the village organizations and promises participation of producers organisation in different plat forms of coordination.
- 281. MINAGRI, in direct collaboration with its partners, will formulate a new policy of popularisation, which will give an essential role to village organizations for benefits of services close to producers. It has been shown shat a certain number of OP have already developed actions of constructive advocacy and deliver various types of services appreciated by their members. In order to prepare its new policy of extension, MINAGRI in collaboration with local authorities MINALOC, IMBARAGA and the national network of village organizations of Rwanda (ROPARWA), will organize contacts with the OPS operating in districts. Considering the diversity of producers organisation, the objective of this exercise is principally identification of POs, which are strongly engaged in delivery of services to their members. It is such organizations which shall play an essential role in supply of farm inputs, rural innovation, support advices to producers and organization of marketing of agricultural products.
- 282. In dialogue with the OPS and local authorities, MINAGRI proposes to create a network of peasant trainers in all sectors and cells. These peasant "agents" will carry out innovations, organize demonstrations and will play a role in the monitoring of the agricultural sector.
- 283. Furthermore, the actions for the period 2005 2008 will concentrate on training of local village organization by specialized agents of OP and on progressively giving responsibility to the later to manage functions of giving advice to producers, basing on requests form members of OP. MINAGRI is conscious that the profession develops risk of OP alienating their base members. Particular attention will be given to the quality of services rendered and to the level of satisfaction

of OP members, shown by subscriptions to OP in question. Previous minimum contribution should be give by the beneficiaries.

284. In the process of professionalisation of OP, MINAGRI proposes to pray a role of being a partner as well as facilitator. Basing in the Principle of subsidiary MINAGRI encourages international collaboration between civil society organizations the experiences of international partnerships existing show that this model allows unions, federations and Rwanda syndicates for professionalism. The projects in place (PROPARWA/PIFA, support projects/IMBARAGA, INGABO, BAIR, FOR and others) financed by the Netherlands cooperation and ACDI, will follow in the next years.

#### 7.2.2. Reform of proximity services to producers and rural innovation

285. The expected agricultural profile in 2020 necessitates a profound change of the extension mechanism in order to respond to the needs and precise requests from the producer communities in an institutional context based on decentralization, professionalisation of actors and specific needs of each commodity chain.

286. The new mechanism will be inspired by the new extension policies based on.

- (I)Participatory development and dissemination of technological options specific to each environment as well as training and information to producers.
  - (iii) Development of own capacities of peasants through training of peasants innovators in the OPS. This training will be carried out from "apprentice ship. Fields", research action to develop through an investigation spirit.
  - (iii) Participatory research based on participatory definition of producers needs and which associate the research, support advice and the producers.
- 287. The mechanism will be carried out giving priority to the most competitive productions, according to advices of PAN with regard to the selections in district plans, of those priority productions which will be the air of public services support.
- 288. The proposed actions in this area will start by elaboration of a new policy of support advice and of participative research which should result in the restructuring of popularisation service and putting in place a plan of action A/C adapted to the new agriculture policy and or the coordination between central and provincial departments will be carried out with the objective of reinforcing technical capacities of produced and to respond to priority request from the communities. A policy of support advices to produces will be elaborated during the year 2005 as well as a strategy not communication in the rural areas.

## 7.2.3 Promotion of Research for Agriculture and Livestock Development

289. Actions of research for development will be about public services' capacity building as far as support to intensification of crop and animal production is concerned. This particularly concerns: (i) increase in the foundation and basic seed production capacity, as well as improved species of cattle by ISAR and SNS (laboratories for in vitro tissue culture, capacities to meet the demand in quantity and quality); (ii) National capacity building regarding crop protection; (iii) perfecting agronomic techniques adapted to different agro-climatic zones, especially with regard to irrigation, soil conservation and fertilizer application; (iv) perfecting adapted, resistant and highly productive cattle crossbreeds, appropriate prevention (prophylactic) and processing plans, as well as livestock production systems, technically and financially performing and environmentally sound.

## 7.2.4 Rural financial systems and agriculture credit development

290. The government orientation position for the agricultural sector consists of increasing the investments in the sector from 8.3 to 14.7. billion RWF in the first phase of 2004 - 2006 in a way to stimulate sufficiently the private sector This should progressively rise during the second phase and the government contribution in the sector will reduce form 14.7. To 10.4 million RWF from 2006 - 2010.

- 291. It is in this perspective that the sector strategy puts accent on the role of micro-economic activities by participants in agriculture development. The finance sector should to this effect play a central role in savings mobilization to finance the sector by the classic type of credit and by micro finance.
- 292. Currently the role of the financial sector in agricultural sector remains very marginal and does not represent more than 2.3% of the total credits in the economy. Some participants in the dynamic financial sector for agriculture in 2003 were UBPR to the extent of 1.5 billion RWF and BRD with 913 millions representing 11% and 27% respectively of port folio of these institutions the contributions of the commercial banks remain weak.
- 293. The micro finance institutions have developed but their technical capacity is very weak. From 292 institutions registered by BNR, only 17 had obtained approval and 8 were in the process of being approved. The contribution of micro finance to agricultural credit is very low and does not exceed 5 % of the total financing.
- 294. For the private sector to participate in agriculture, a particular attention should be put on the poor who constitute a large part of produces and consumers of agricultural products they therefore has need to access to financial services, not only for their current consumption, but also to acquire the agricultural inputs and other financial and social services.
- 295. A strategy to create financial services in the neighbourhood and assure the development of the agriculture credit should be developed through the following actions:
- > Elaboration of a study on agriculture credit problems and putting in place agriculture guarantee fund
- Encouragement of the banking sector to intervene in agriculture through a close dialogue and services of credit to create a partnership and continued exchange of information on the agricultural sector.
- Mobilization of credit lines for agriculture projects.
- Support to create micro finance institutions at provincial level
- > Reinforcement of financial capacities and mechanism of management of those institutions.
- Negotiations witch different partners to harmonies the facilities and conditions of loans given to farmers
- The training on the agriculture credit and supervision of businessmen on the differentiation of financial products to facilitate the choice of the credit type suitable for their agricultural activities.
- Integration of refinancing of these institutions of micro finance among the eligibility criteria in the agriculture guarantee fund.
- 296. This programme will contain four sub programmes:
  - (i) creation of a conducive environment and promotion of entrepreneurship
  - (ii) promotion and development of commodity chains,
  - (iii) transformation and competitiveness of agricultural products,
  - (iv)rural infrastructures for support to producers.

## 7.3. Promotion of commodity chains horticulture and development of agribusiness

# 7.3.1 Promotion and development of commodity chains and horticulture

297. The criteria of choosing the commodity chain takes into account the importance of potential production and intensification, generation of revenues in the national as well as regional and international market possibilities of transformation conservation, and storage.

298. It is proposed that during the year 2005, emphasis will be put on the promotion in a holistic the commodity chains of tea and Rice. Other commodity chains to be promoted are coffee, maize, beans, wheat, oil crops, mainly soybean as well as fruits and legumes. The organization actions and preparation and expansion of those chains will equally be undertaken, in way to put together all the required conditions for their development during the following years. The accompanying actions (inputs, seeds, research, and protection of crops) are equally developed in this document.

# Specific Action for the commodity chain tea

299. The planned objective for tea is to attain a production of 39000 tons of black tea in the year 2010. For this to be attained, it is envisaged to carry out she following actions;

- Intensification in view of multiplying by 3 the yield of green leaf from now to the year 2010.
- (Fertilization, new varieties which are more productive, better extensions services to producers and their associations
- Improve the quality of green leaf from 67% to 80%
- > Establish a tea factory at Mushubi and Nshili
- Fellow up the privatisation programmer of 8 factories of OCIR Tea
- Reinforce the partnership in research with ISAR (put in place a laboratory of culture and tissues in vitro, research of new varieties etc).
- > Put in place specific actions of popularisation on the tea (partner ship with productive associations, partnership with the Banques Populaires for the credit facilities of inputs.
- > Diversify the products put on the market (black tea, green leaf etc).
- Carry out promotion of Rwanda tea in Rwanda and outside.

#### Specific actions for the commodity chain Rice

300. (ii) strength en research on varieties especially highly productive varieties, with short cycles, to produce 2 harvests annually

- (iii) Strengthen the capacity of producers associations in order to acquire knowledge of inputs supply chains. These aim at elimination of\rice imports and coverage of national needs as well as the realization exportable surplus. The assumptions within the framework of this action plan are based on continued development of rice schemes in order to attain 11.800 ha in the year 2009 and average yields of 5 Tonnes of paddy rice/ha so as to produce 40,000 tonnes of milledrice in the year 2009. It is in this framework that the following actions shall be carried out:
- Mobilize the supplementary funds for development of new rice perimeters so as to attain 11.8000 ha developed area in the 2009.
- ➤ Reinforce the capacities of associations in the management of the agricultural production time schedule, water management, take charge of extension personnel based on regional, successful experiences in intensive rice production systems.
- > Expedite the privatisation process of rice processing units.
- > Establish incentive measures to the private sector for installation of new rice processing units.

## Specific actions for the maize

301. These aim at increasing the yield and production of maize with a view of increasing demand, following changes in habits of eating habits. It is planned to double production and to attain 160.000 in the year 2010.

302. It is in this framework that the following actions will be undertaken.

- > Reinforce research in varieties in view of improving the range of avail able varieties;
- Support the private initiatives for taking in charge of the commodity chain (organization of produces, supply of inputs)
- > Put in place measures to promote maize growing by rotation with Irish potatoes in Ruhengeri and Gisenyi zones to avoid problems of monoculture of the Irish potatoes;
- Promote partnership with ISAR, popularisation departments, the private sector and producer organizations for better transfer of technologies
- Facilitate the private sector and the OP to get access to the market offered by public departments and humanitarian organizations in the sub region
- put in place mechanisms aimed at promoting changes in food habits of Rwandans and to increase the share of maize and of its derivatives in food rations.

## Specific actions for the commodity chain wheat

303. These are included because of contributing to reduction of importations so as to attain production of around 39000 tons in the year 2010. It is in this frame that the following actions have been developed.

- Provide support establish flour mills in Gikongoro and Byumba and launch production in these regions
- > Reinforce the research program on wheat suitable for bread making.
- Offer facilities to the private sector in view of ensuring pattern ship with producer organizations for availing inputs and supervision of production.
- > Support the training of local bakers in view of promoting consumption of bread and other products from wheat flour. Promote food technology programs aimed at giving maximum value to wheat flour.

## Specific action for the commodity chain of Irish potatoes.

304. These will allow to satisfy national demand, mainly by increasing yields. It concerns in particular;

- Reinforce the diversified research of varieties, improve the quality and the productive potential in general;
- increase the production capacity of seeds to grow (we presently have 30% of natural needs) in view of satisfying the national and sub regional market.
- Support profession of production of commercial seeds and guarantee the quality.
- Reinforce the commercial capacities of organizations of producers kind commercial participants in view of guarantying regular supply and good prince to producers;

#### Specific actions for the beans commodity chain.

305. These aim at increasing production and the yields of this crop which remains of great importance in Rwandans' food, notably as regards proteins. Thus, the following will be undertaken is:

- ➤ To develop research programmes in order to improve the quality of the climbing bean seeds (early maturing, colour, productivity etc.)
- To provide increased availability of support sticks via accelerated development of agroforestry
- > To promote cultivation in rotation with maize or potato.

## Specific actions for oil crops

306. These are produced to contribute in reduction of chronic deficit in lipids. The interventions will be concentrated on soybeans with diversification by the promotion of sunflower and groundnuts.

- Increase the production capacity of good quality seeds and of inoculation for soybeans (Rhizobium)
- Develop programs of development research on the mineral fertilization in order to increase the production potential even in regions having acidic soils;
- > Support the development of transformation units of soybeans into flour and other derived products(milk and Tofu)
- Make the consumption of products based on soybeans popular

## Specific actions for the Coffee commodity chain

- 307. The aim is the production of 37,000 tonnes of green coffee by 2010 of which 60% should be fully washed coffee.
- 308. Actions for promotion of coffee commodity chain will target the increase of both quantity and quality.
- a) With regard to quantity, the following is planned:
  - ➤ Intensification and improvement of agronomic techniques (regeneration size, mineral fertilization, fight against diseases...)
  - ➤ Replacing old coffee trees, planting new productive and disease-resistant varieties ( production of 69 millions plants by 2010)
  - > Strengthening research on new varieties and fight against diseases
  - ➤ Reorganise the extension system by establishing 5 coffee-growing areas
  - > Support to associations of coffee farmers ( easier access to inputs and materials)

# b )Regarding the quality

- ➤ Increase quantity of standard coffee (hulling centres and access to credit)
- ➤ Increase the quantity of fully washed (aiming at 60% fully washed coffee, setting 107 cleaning stations with a capacity of 200 tons/year of green coffee by 2010)
- > Carry out marketing for Rwanda coffee ( search for market, organizing and participating in fairs and exhibitions)
- Maintain quality control
- > Promote local consumption of Rwanda coffee
- 309. The targeted objective for horticulture is to boost the production activity on a sustainable basis. This supposes putting in place of an appropriate and sustainable airfreight mechanism; technical improvement of production; improvement of the organizational framework and professionalization in the exports sector.
- 310. From a technical point of view, the actions to be carried out relate to: putting in place, within the extension framework, of a specialized service for the training of supervisors, the proximity environment (conditioning fields and centres) with regard to production standards, quality and packing.
- 311. Institutional support will be provided to exporters with a view to a better organization and professionalisation of their profession, especially concerning permanent market prospecting (keeping pace with commercial innovations); Continuous promotion of Rwandese products on the external markets; rational and efficient organization of export; and very strict quality controls.

312. It is envisaged to cooperate with other concerned Ministries, with the view to put in place appropriate support infrastructure and equipment, particularly establishment of an adequate cold chain, starting with the rehabilitation of Kanombe Airport's cold rooms.

#### Specifications for the milk commodity chain

- 313. The development of the milk field will be closely linked to the action of the improvement of cattle performance as well as modernization and intensification of its production. The overall objective is to reduce the number of cattle from the current number of 991,000 heads to 703 000 in 2020, while increasing milk production to cover the needs estimated at 180 litres per inhabitant instead of the current 12 litres. This requires important genetic improvement, which will be based on crossbreeding activities through artificial insemination, embryo transfers and importation of pure breed cows. The following are the working assumptions:
  - ➤ The current livestock is composed of 86% local breeds, 13% of crossbreeds and 1% exotic pure breeds.
  - ➤ The proposed breeding process is 5% in year 1 and 2% for the following years. At the same time, 18% of the livestock of local breed will be eliminated and be used to provide meat to the market. This will reduce the local cattle to 305 000 heads in 2020.
  - > The crossbreed cattle which is currently 13% of the population will reach 434 000 heads in 2020.
  - ➤ Imports of pure breeds will continue at the current level of 500 heads/year up to 2010. With natural increase this category will reach 23 000 heads in 2010 as compared to the current number of 9 800, in order to reach the objectives in animal production.
- 314. The expected total milk production is 2 240 million litres, which corresponds to an average production of about 3 000 litres of milk per cow, which represents an average performance of 10 to 15 litres of milk per day and per cow.
- 315. Necessary support with regard to animal health will be the organization of a system for providing veterinary services and artificial insemination which will be gradually transferred to the private sector, and encouraging professional organisations to put in place, in the main milk centres, adequate systems for collecting and processing milk, based on quality and hygiene criteria in conformity with good practices, especially regarding cold chains and laboratories for quality control.

#### Specific actions for the meat commodity chain

- 316. The development of the meat commodity chain will be carried out through intensification of production techniques, promotion of modern investments for abattoirs, processing, conservation and transport of produced meat. Effort will also be put on diversification so as to produce goat meat, pork, beef, chicken and other kinds of meat. The objective is to maintain the growth rate of meat production between 14 and 18% per year so as to increase the availability from 5 kg per person and per year in 2002 to about 34 kg per person and per year in 2020.
- 317. Specific actions consist of promoting the financing of investments in intensive livestock farms (cattle, goats, beekeeping, etc.) as well as slaughterhouses and modern equipment for transportation and conservation through the mechanism of an agricultural guarantee fund.
- 318. The promotion of a veterinary supervision service will be carried out through supporting initiatives of livestock keepers organizations, private veterinary doctors, as well as farmers or organizations capable of providing proximity services to other livestock keepers.

# Specific actions for the commodity chain of hides and skins

- 319. The development of the meat commodity chain will lead to the intensification of activities in related to hides and skins.
- 320. Specific actions consist in promoting hides of good quality and leather work by craftsmen and small SME/SMIs, through training, financing and institutional support to professional bodies involved in these processes.

# 7.3.2 Transformation and competitiveness of agricultural products

- 321. Diagnosis has revealed that transformation of agricultural products is an important factor in competitiveness in the sense that it improves intrinsic quality of products, and helps in diversifying and presenting them. Indeed competitiveness of a product depends on the type, quality and cost price, its stability and marketing in approaching and making customers faithful. Productivity is an important factor of the competitiveness agricultural products.
- 322. The strategy adopted is the development of agro business through promotion of competitiveness of Rwandan agricultural products and the creation of a conducive environment to investment in agriculture.
- 323. Actions and measures intended to increase productivity are presented in the program that tackles the development of systems of sustainable production. These are mainly the investment in increasing soil fertility and improvement of proximity service delivery (availability and increased use of inputs, agronomic research and reformed extension advice and demand-driven).
- 324. The second series of actions for increasing productivity are related to infrastructure development. The State should invest in basic infrastructures (electrification, water supply, roads etc.) in order to create conditions that are conducive to the establishment of transformation units by the private sector (coffee washing stations, tea factories, flour mills and others, construction of markets, ICT and telecommunication etc.) It is also envisaged that the State should develop important infrastructures and later transfer their management to the private sector (factories, transformation units, cold storage at the airport to attract foreign investors for promotion of exports) Private businessmen will be encouraged to invest in refrigerated lorries to collect perishable products from remote areas in order to have in place an uninterrupted cold chain.
- 325. Searching for and penetrating new markets are critical in agribusiness and competitiveness. Therefore promotion activities should be carried out to identify niches, certification and respect to the standards required by markets, development of the fair-trade model. Measures should be taken as well to benefit from AGOA. Rwandan embassies abroad should play a big role in the promotion of commerce while the Government is to encourage organizing exhibitions at national and provincial levels, and the participation in international fairs abroad by Rwandan private businessmen.
- 326. The central role of the Government is to set up a political, social, economic and legal environment, which is attractive and conducive to the private sector in such a way that entrepreneurs fully assume the risk of their investment and get benefits from it. Support from the public sector will mainly consist of funding studies in neighbouring countries prior to creation of an enterprise, in agronomic research, pilot trials, market studies, and search for information, support to investment (bonus credit, investment code, fiscal advantages).
- 327. It is in this context that the following is to be conducted:
  - (i) CAPMER interventions will be enhanced
  - (ii) Investment code must be updated to be made more attractive, by considering suggestions from different stakeholders (RIEPA, Rwanda Private Sector Federation, Inter-professions etc.)

- (iii) Cooperation with partner countries in agribusiness is to be fostered
- (iv) An information centre with e-commerce facilities will be created by collecting and disseminating information about business opportunities and agricultural markets
- (v) Incentive measures for promoting SME/SMI should be developed (training potential investors in drafting projects to be presented to the bank-CEFE approach or others, creation of an incubation centre for innovations and promotion of agricultural enterprises).

## 7.3.3. Rural infrastructures for support to producers

- 328. Diagnosis of the sector has revealed great lack of infrastructures to support production, transformation and marketing of agricultural products.
- 329. The strategy for this sector will be based on:
  - Implementation of local development plans plus mobilization of resources with grassroots communities,
  - > Mobilization of financial resources through the process of strengthening the CDF,
  - > Development of basic infrastructures for the development of networks,
  - Total involvement and enhancement of capacities of the grassroots communities in management and maintenance of infrastructures.
- 330. The following are specific objectives planned for the period from to-date to 2020:
  - ➤ The good road net work will pass from 0,54 km/Sq Km in 2000 to 0,60 Km/Sq Km in 2020.
  - Annual electricity consumption will pass from 30 Kwh/inhabitant in 2000 to 100Kwh/inhabitant in 2020.
- 331. The SPAT will conduct long term actions, however for the period 2005-2008 will be devoted mainly to the following actions:

## In the area of Livestock:

- > Increasing watering points in areas of strong water deficit
- ➤ Enhancing actions for the development of local markets for agricultural and livestock products
- > Setting up para-veterinary services
- ➤ Development of milk collection centres for milk collection and cold storages among farmers associations.

#### In the area of road infrastructures:

- Development and rehabilitation of feeder roads
- ➤ Mobilization of beneficiaries (communities) to ensure maintenance of the infrastructures by farmers organized around big production networks or transformation units.

In the area of marketing, storage, conservation and transformation

- Development of infrastructures for storage, conservation and the cold chain to facilitate exports
- > Increasing the number of coffee washing stations to increase production of speciality coffee
- > Preparation of a plan for rural electrification

## 7.3.4 Creation of a conducive business environment and enterprise promotion

332. One of the components of the strategy concerns capacity building of the service providers (SP). The SPs who have most needs for capacity building include: local NGOs, associations federations, young research departments or private individuals who regularly offer or have the possibility to offer proximity goods or services to beneficiaries. It is often a matter of delivering

services of studies, diverse support (trainings, management support, etc.) or supply of inputs. This component will also concern key public institutions such as research, extension, services for competitiveness and agribusiness promotion, laboratories, pre-basic seed production and animals of appropriate genotypes, as well as agricultural training institutions.

333. The second component of this strategy concerns privatisation of public bodies or public services, which, by their nature, have a quite attractive character for the private sector. This concerns particularly the pursuit of actions currently underway with regard to privatisation of public tea and rice entities, inputs supply (manure, improved cattle, pesticides, etc.), seed multiplication on some segments of the seed commodity chain, some training and supervision activities, fertilizer marketing, etc. This option will lead to the state's non-ambiguous disengagement from these sectors in order not to endanger the emergence of private initiatives.

#### 7.4. Institutional development

334. This programme is comprised of three sub-programmes: (i) the legal and regulatory framework; (ii) Reforms and institutional support to public services, and (iii) Coordination and Monitoring and Evaluation of the agricultural sector.

## 7.4.1 The legal and regulatory framework

335. In order to be able to accomplish its mission, Minagri will conduct, during the year 2005, a review of its organizational structure (the Ministry's restructuring) and review and update agricultural legislation. Among these, the new land law will have to find the implementation texts and different laws in the areas of inputs, sanitary prevention, natural resources management, and encouragement of the private sector's enterprise and professionalisation will be reviewed and updated where necessary.

#### 7.4.2 Reforms and institutional support to public services

- 336. Minagri will also carry out a series of reforms with regard to both its organisation and from the point of view of its functioning.
- 337. Reforms will particularly affect the extension services, public or para-statal bodies under the tutelle of Minagri, etc. with the view of adapting those structures to the new missions. These reforms will be carried out based on the institutional analysis carried out in 2003 and whose recommendations will be the subject of an implementation plan within the framework of the support envisaged for the period from 2005 supported through external funding. Three development partners have already expressed their willingness to support MINAGRI in this fundamental action.

# 7.4.3 Coordination and Monitoring and Evaluation of the agricultural sector

- 338. Decentralization, disengagement of the State from productive sectors and promotion of diversified interventions in agriculture will lead Minagri to the reinforcement of its planning and coordination functions.
- 339. The following are the urgent actions planned:
  - (i) define a coherent and integrated planning system
  - (ii) Develop a strong statistical base providing an update and accurate vision of the sector
  - (iii) establish a dynamic and participatory system of monitoring-evaluation and an information system constructed on the basis of integrated database
  - (iv) recruit and train a personnel in charge of piloting the sector
  - (v) putting in place an environment of dialog with producer organizations and networks, from private sector and NGOs

(vi) develop support actions in capacity building (training, information, technical assistance, and various support) with communities and networks of producers from private sector and NGOs.

340.In this context, new technologies of information and communication (ICT) will be involved to support traditional functions of piloting, but also a new form of communication both internally and externally within Minagri.

341. In addition to tools established in communication and monitoring-evaluation of the sector, Minagri will need to effectively apply the "rural development cluster" and inter-ministerial or intersectoral committees to ensure coordination of all stakeholders.

## VIII. CONTRIBUTION OF SUPPORT SECTORS TO AGRICULTURAL DEVELOPMENT

342. Effective achievement of priority objectives and actions at various PSTA strategic axes closely depend on the contribution of the support sectors described here under:

## 8.1. Governance and local development

- 343. Decentralization process has transferred responsibility to local governments and has created a situation of reducing the direct relationship between MINAGRI and producers. Mechanisms and modalities adapted to the new situation will be established so that requests from producers and grassroots receive the support contained in the action plan of the ministry.
- 344. The beneficiaries' needs collected in participatory workshops and stored in a data base will serve as a mirror to all stakeholders to facilitate use of that information in identification, funding and monitoring of agricultural micro projects initiated by grassroots communities in a decentralized way.

#### 8.2. Environment, water and land security

- 345 Given that all environmental problems draw the interest of all agriculture sub-sectors, attention to this issue will be integrated as crosscutting in all actions. Anti erosion fight, promotion of corridor cultivations, rational management of pastures and intensive cattle raising systems, promotion of organic manure, biological methods of cultivation and agro-forestry.
- 346. Special action of rational water management will be developed in terms exploitation, conservation and storage. A special plan will be devised for high risk draught areas Bugesera, Umutara) and for fragile echo systems such as marshlands.
- 347. MINITERE will implement enactments for the application of the new land law. Minagri will have to bring a contribution to this process given the importance of securing land on the intensification and diversification of production. Working groups will be established between concerned Ministries for implementing selected activities from 2005.

#### 8.3. Education and scientific research

- 348. Minagri will rely on the education sector to integrate at all levels, basic concepts of preserving natural resources, valorising the agricultural profession and acquisition of basic principles for safe, profitable and sustainable agriculture. The courses could be introduced as part of the subjects of science or environment.
- 349. Schools should serve as demonstration centres as well as models for inputs production in the case of secondary schools with a boarding house at least. The ministry of Education could, in cooperation, with grassroots communities, organize in the frame of functional literacy, training

and extension modules on the basis of "Guides" and other appropriate materials. Harmonization of literacy actions will be sought in implementing every development project piloted by Minagri.

350. Universities and colleges (faculty of agronomy of UNR, KIST,ISAE etc. should be involved in the training and extension of new agricultural techniques.

351 A special module for adaptive research centred around the SPAT priorities will be embedded in ISAR action plan. An action of improving agriculture and veterinary institutions will be conducted and supported.

#### 8.4. Commerce, Industry and handicrafts

- 352. Commerce, industry and handicrafts play a key role in food transformation and adding value to local and external consumption products.
- 353. Food transformation centred around food quality helps getting products with high added value matching the taste and the preferences of consumers. To get there, there is need for agricultural strategies centred around the following three axes: 1. improvement and capacity building of the institutional framework; 2. promotion of agribusiness through transformation of agricultural products; 3. search for product preferences and quality improvement and stimulation of active participation of private sector.
- 354. Improvement and institutional capacity building will be achieved through revision of the legal and regulatory framework.
- 355. The latter must first create conditions for food products safety. A study is to be conducted to establish an agency or another institution in charge of food security and food safety standards.
- 356. Such a structure should be responsible for the coordination of activities, setting and controlling standards in matters of national food safety, certification of food industries, programs of education on good cultivation practices, danger control for food, implementing activities related to food products like the National Bureau of Standards, reinforce national capacity namely of the National Office of Standardization, develop national laboratories to carry out specific tasks
- 357. Promotion of agro business is seeking improvement of added value of specific net works in order to serve internal and external markets. Quality starts with production, good farming practices should be introduced during production to avoid taking late corrective measures, after having suffered losses.
- 358. Minagri is expected to put in place from 2005, a centre in charge of promoting agribusiness and competitiveness. The centre will: ensure training of producers` associations (book keeping, good farming practices, use of inputs and modern conservation techniques); putting in place a code of farming practices, devising certification and regulation amongst associations: develop a program for the promotion of small-scale food industries, develop a program for standards of international food security for small food industries (HACCP) by associating universities and research institutions (KIST and others); develop institutional support for small food industries; promoting cooperation between Minagri and institutions involved in food transformation like KIST, ISAR, NGOs etc., mobilize people working in food transformation to share necessary information; encourage the promotion of cultivation of high value crops, initiating pilot programs for transformation, develop marketing locally and abroad, develop incentives to attract investment in agribusiness, improve access to credit, strengthen partnership between public and private sectors in matters of basic investment, marketing etc.
- 359. The considerations above indicate that the sector of commerce, industry and handicrafts is expected to play a key role to foster the implementation of PSTA. Further to what is indicated, the following complementary actions are expected: 1 promoting services for access to information,

access to training and local, regional and international markets; 2. develop, though appropriate institutions, new transformation technologies, communication and marketing techniques, 3. set international standards in matters of food safety and food hygiene, 4. foster networks and associations of agribusiness with other regional and international organizations, 5. promote initiatives and activities for the development of handicrafts and industry.

#### 8.5. Health and social protection

- 360. The sectors of health and social protection will cooperate more in the framework of the SPAT in a number of areas: 1) the nutritional status of the populations, the nutritional surveillance of children, pregnant women, sick people (obesity, malnourished, HIV/AIDS etc.,2) food for other vulnerable groups (orphans, old people, destitute, etc.)
- 361. Appropriate measures are to be taken for mainstreaming people living with HIV/AIDS and their protection by ensuring health prevention of food through control of quality and the place for food storage and transformation.
- 362. Mechanisms for general monitoring of the food situation in the country are to be put in place, and ensure that tools for correct harvest forecast and quick warning system are in place to detect risks for food deficit, catastrophes so as to prevent famine and rescue people under threat.

#### 8.6. Infrastructure of transport and communication (ICT)

363. Cooperation is needed between MININFRA in order: 1) to rehabilitate roads, 2) for promotion of transport of goods, easing administrative constraints and diversification of routes and corridors for regional and international trade, 3) dissemination of new information and communication technologies in rural areas and to the professionals of the sector.

#### 8.7. Financial sector

- 364. For the financial sector to play its role of as investment catalyst, particular efforts must be made by the Government and financial institutions to reinforce the financial sector to enable it to respond to potential requests for agricultural credits. Reinforcing the financial sector will be achieved through diversifying tools and financial products such as the creation of: 1) a market of assets for local mobilization of long-term resources, 2) a company dealing with assets related to profitable agricultural projects, 3) a leasing company to finance equipment and necessary tools to modernize agriculture, and 4), a system for agricultural credit guarantee for which a study for its establishment has just been completed.
- 365. The role of financial institutions as regarding agricultural credit should be clarified to facilitate dialog with stakeholders from the agriculture sector. Thus, proximity financial services should be developed through establishing appropriate regulation, strengthening of micro finance institution capacities, and external mobilization of funds for the re- financing of those institutions. The BRD initiative should be given support so as to stimulate micro finance initiatives in agriculture.
- 366 UBPR has got a crucial role to play in funding agricultural SME/SMI in rural areas. On this issue, agreements between Minagri and UBPR will be set to channel the lines of credit to be mobilized. UBPR will act as an intermediary to facilitate the PME/PMI to benefit from the agricultural guarantee fund.
- 367. Commercial banks will be encouraged to support BRD in funding agribusiness. Considering its mission, BRD will foster funding newly emerging enterprises whose financial needs for growth and turnover will be borne by commercial banks.

#### PART THREE: ACTION PLAN AND INDICATIVE FINANCING PLAN

#### IX LOGICAL FRAMEWORK AND ACTION PLAN

368. The logical framework of THE SPAT and the comprehensive action plan are presented as appendices 1 and 2. This presentation illustrates the harmony between objectives, results and actions proposed.

#### 9.1. Content of the action plan

369. The SPAT action plan for 2005-2008 is presented as appendix II. It presents the different programmes, specific objectives, expected results, actions to be carried out and the responsible actors in charge of implementation of the actions.

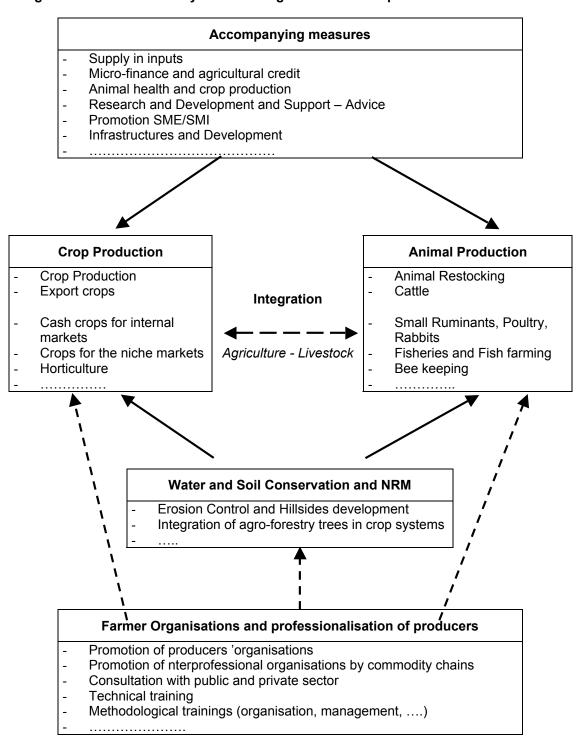
## 9.2. Implementation modalities

## 9.2.1 Coherence and articulation challenges

370. There is need to establish coherence of the SPAT with regard to the following:

- With existing and prospective logical frameworks, namely the Logical Frame for the Fight against Poverty and the Rural Development Strategy (SDR). The government is finalizing a strategy for rural development with the World Bank, and Minagri will be a stake holder. The task force to be put in place will act in such a way that SDR considers strategic elements and priority programs and that necessary coherence is insured. Besides, PSTA will have to consider the close relationships between mandates of MINAGRI, MINALOC, MINITERE etc. and must develop harmonization framework of their different strategies. That exercise is expected to be completed before the end of the SPAT transitional year 2005.
- With other programs and projects. Those are the projects identified in the support to private and public sectors on the one hand, and projects identified in local development plans on the other. It will be important to exploit the reports from cooperation workshops at grassroots and update development plans of districts to better include needs and requirements of agriculture at the local level.

Diagram 2. Toward a local dynamics for agricultural development



- 371.During the exercise of making the SPAT coherent , five major challenges were identified and are described in the following paragraphs.
- 372. Mobilising and coordinating all stakeholders in the agricultural sector: The national agricultural policy clearly indicates that development of this sector is largely dependent on the

private sector. Transformation of agriculture sector requires a great number of actors (peasants' organizations, private sector, local authorities, public services, NGOs...) It is this fundamental characteristic that widely explains why approaches in the past, dominated by production means belonging to the State and centralized planning, did not succeed. Transformation of the rural economy needs joint efforts from private, public sectors and civil society. The first challenge is, thus, the promotion of exchanges and cooperation between the different stakeholders and the formulation of strategies that integrate different interventions allowing the various actors to play their respective roles.

373. Coordination of technical and financial support. In the current situation, many projects interventions in agriculture lack adequate coordination, resulting in inefficiency: Parallel existence of different strategies, partial interventions, duplication of efforts, wastage of funds and energy, discontinuity of reforms engaged. Taking into account these shortcomings, the Government with partners intends to progress from the project approach to the program approach presenting the following benefits: shared sector vision, cooperation of partners to implement a common strategy, combination of human, logistic, and financial resources, clarification of roles and institutional continuity. The second challenge is that of progressing toward well harmonized approaches (ministries and donors, and having tools and mechanisms that guarantee good coordination of planning, implementation and monitoring-evaluation of agricultural development programs.

374. Articulation of national level at centralized levels. Decentralized entities: provinces. Districts, villages and even sectors have got to prepare their own development plans. Their policies and strategies will get support from National documents. The guidelines for the national strategy elaboration indicate that this is a repeated approach "since national planning starts from decentralized strategies". The approach of elaborating decentralized plans is based on a systemic perception of development issues and cooperation between different actors to identify:1) problems and their causes, 2) constraints, 3)potentials, 4)hierarchy of problems, 5) solutions to be envisaged as well as strategies to be implemented. Decentralized entities elaborate policies and strategies for sectors they consider as priorities. Elaboration of provincial development sectors is based on districts development plans. The MINECOFIN guidelines underlines, however, that development plan of provinces is neither an addition, nor a synthesis of PDC. Analysis of provincial priority problems is needed and suggestion of actions beyond individual districts in the aim of facilitating mobilization of resources and coordination of interventions.

375. Elaboration of the SPAT comes after the elaboration of community development plans (PDC). In the sense that most provinces have already formulated their PDC, there is risk for lack of interest and reluctance from beneficiaries to participate in the formulation of national development strategies, since most activities of PDC have not been funded . The third challenge is that of combining technical and financial support made at central level with decentralized entities on the basis of subsidiarity principle which stipulates that development actions and management of affairs should be conducted by appropriate actors and at the right levels .

376. Articulation of needs and financial flow to national macro-economic frame work and to the multi-actor environment of the sector. National policies consider agriculture sector as the stepping stone for fight against poverty. Economic growth in the primary sector should help rural households get out of their generalized poverty. This economic growth would create progressive development of secondary and tertiary sectors in rural areas, which could help create employment outside agriculture. However, most agricultural activities remain at subsistence. The agricultural development strategy should combine commercial with development orientation. Transformation of a market-oriented agriculture must be coupled with food security and environmental protection. Besides, in the context of fight against poverty, it is important to attend to the fact that all social layers, especially the most vulnerable, take benefit from the economic growth advocated.

377. The articulation of the commercial orientation to the development orientation. National policies consider the agricultural sector as the springboard for fighting poverty. Economic growth

in the primary sector will enable rural households to come out of their situation of generalised poverty. This economic growth will also encourage the progressive development of the secondary and tertiary sectors in rural areas, which will result in creation of off-farm jobs. However, the majority of agricultural households are still in a subsistence economy. The strategy of agricultural development should conciliate the commercial orientation with the developmental orientation. The transformation of a market-orientated agriculture must go hand in hand with the search for food security and environmental protection. And in addition, within the context of fighting poverty, it is important to make sure that the different social strata, especially the most vulnerable, benefit from the envisaged economic growth.

#### 9.2.2 Elaboration of operational programmes and investment programmes

378. The transitional year will be devoted to formulation of priority programs, which have shown funding willingness at the donors` conference or following the negotiations Minagri will have started with the government and partners.

379. In this regard, the program for institutional support currently under elaboration which intends to reinforce Minagri's capacity, will help start the process in a relatively reasonable period of time.

## 9.2.3 Elaboration of sub-sector policies and strategies

- 380. Given the necessity of implementing innovative approaches that are consistent with the ambitions of the sector, Minagri must revisit some of its policies and strategies together with various action plans especially in the service of assistance and support, in participatory research, soil reclamation and fertility etc.
- 381. The ministry ought to get a "gender strategy" as well that will serve as guide to actors from public services and OP, and a communication strategy helping to improve the relationship between various stake holders.

# 9.2.4 Establishment of a mechanism and system for monitoring/evaluation

- 382. Successful implementation of the strategy requires regular monitoring and periodic evaluation so as to make necessary adjustments.
- 383. In this view, a monitoring/evaluation mechanism led by the Division for planning and agricultural statistics in Minagri, involving all stakeholders, in accordance with modalities is to be elaborated soon by following the monitoring/evaluation of the Poverty Reduction Strategy framework led by Minecofin, should be established.
- 384. Annual reports will be made by DPS(Planning Department of MINAGRI) on basis of reports presented by managers of different programs.
- 385. The strategy will be reviewed periodically in relation to that of CSLP, while relevant indicators are to be defined and regularly revised.

#### 9.2.5 Next steps: Elaboration of MTEF, macro-economic and financial framework

386. Elaboration of Mid term Expenditures (CDMT) for 2006-2008 and the polishing of macroeconomic and financial framework will continue on 2005.

## 9.2.6. Search for harmony in multi-stakeholder environment

387. Since independence the State has been playing a crucial role in the agricultural sector: research, supplying inputs, micro finance, marketing agricultural products. The process of economy globalisation, market liberalizations, democratisation and decentralization and reforms

of public sector, have deeply altered the institutional landscape. These processes enhance the progressive disengagement of the State, and emergence of other actors.

388. In the current situation, Minagri regards business men, peasants' organizations and local authorities as partners in the implementation of PSTA.

Minagri will facilitate synergy between public, private sectors and civil society who are development partners. Economic operators are in search for market opportunities and require competitive products. They can, therefore, initiate diversification of production and stimulate quality of agricultural products.

389. A well rural setting organized can mobilize populations for actions contributing to intensification, diversification and sustainability of production systems. Public authorities play a crucial role of in programming the implementation of agricultural action plans, which are adapted to local reality.

390. Agricultural development is to be framed in fight against poverty and encourage economic growth. This fight needs coalition of several forces at several fronts:

- Coalition of forces alludes to pluralism, multi-actors process, mobilization and reinforcement of capacities of civil society, to social dialog, partnership between public sector and civil society. The SPAT is strongly based on the principle of horizontal subsidiarity showing that public sector is stepping down for private sector, or civil society organizations.
- Different levels refer to acting at international, regional, national, provincial and local levels. In additional to horizontal integration of different stakeholders from the same geographic area, each stakeholder has to develop its vertical links. Production net works from producers to consumers are the examples. Development of agriculture in Rwanda depends on international agreements as well as organizations of producers in villages. The SPAT subscribes to the principle of vertical subsidiarity, which stipulates that development actions and management of affairs are to be carried out at the right levels. In practice, this principle generally results from a delegation of powers from the centre to decentralized levels.
- Multiple fronts indicate that agricultural transformation can take place only by combining several processes of performance improvement. The SPAT puts special emphasis on a number of services to be delivered to the rural area: research, extension services, supply of inputs, credits, marketing, and transformation of agricultural products etc.

391. Taking into account the new context, PSTA defines the role of the State especially around the creation of conditions that are conducive to the development of the various stakeholders. For so doing, Minagri aims at partnership with a great number of stakeholders. By so doing, MINAGRI aims at cooperating with other stakeholders. The following table indicates the likely partners.

Table: Partners for agricultural development\*

	Level					
Stakehold ers	Village/cell	Sector	Districts	Provincial	National	Internation al
Farmer organizatio ns	FarmerAss ociation	Generic FO Farmer Organizatio ns organized around networks	Producers union Inter- grouping Inter professiona I producers union ( per network)	FO(IMBARAGA, INGABO, BAIR, FOR) Producers Federation STAVER,	ROPARW A IMBARAG A UCORIR WA(rice) STAVER IAR	EAFFE REFON FIPA

	Level					
Stakehold ers	Village/cell	Sector	Districts	Provincial	National	Internation al
				IAR Inter professional		
Other civil society Organizations	Community Based Organisatio ns ( CBOs)	Churches	Faith Based Organisatio ns (FBOs)	FBO's		
Private sector organizatio ns and PPPdevelo pment				FRSP	FRSP	
Democratic structure	Consulting Council CPA/CDC	Consulting Council CPA/CDC	City Consultativ e council		National Assembly	
Coordinatin g structures				OCIR coffee OCIR tea	National Tender Board/CE PEX ONR/ OCIRs, RIEPA	COMESA OMC
Research service( public)				ISAR stations	ISAR/ISA E UNR/KIST /IRST National Veterinary Laboratory	CGIAR ASARECA ICRAF and other regional bureau
Research service( private)					Independe nt universitie s(UNR) Adventist university	
Training Service( public)	Nursery and Primary schools	Nursery and primary schools	Nutrition centres and secondary Schools	Farming and veterinary schools (EAV) Feminine agronomy school	UNR ISAE KIST RIAM CAPMER INADES	
Training service (private)			Primary and secondary schools	Primary and secondary schools	Primary and secondary schools	
Advisory services ( public)			Farming service Officer (RSA)	DAEF Radio	National radio Dir. advisory	

	Level						
Stakehold ers	Village/cell	Sector	Districts	Provincial	National	Internation al	
			Technical agent		service MINAGRI UTT ISAR		
Advisory services ( private)	F O NGO	F O NGO	F O NGO	FO NGO	FO NGO		
Financial services	Tontines	Micro- finance services Project credit line	Cash and credit network Micro-Finance Institutions (IMF) Community banks	Commercial banks Community banks	NBR/BRD Commerci al banks UBPR Agricultura I Guarantee Fund		
Input sector (Public)				Seed companies SNS	National centre for IA SNS		
Output sector ( Private)		Fertilizer, pesticide, etc traders	Traders FO Seed multipliers	Traders FO	Traders FO		
Transforma tion and commercial isation	Local craftsman	PME/PMI	PME/PMI	PME/PMI Agribusines s units	Agribusine ss units	Foreign private partners	

<sup>\*</sup> This survey, certainly non exhaustive, presents the technical and operational partners of the central Government and local authorities for the implementation of its Rural Development and Farming plan.

It does not take the into PTF into account (Technical and Financial Partners)

#### 9.2.7. Definition of the role of different actors

# 9.2.7.1. Role of the State and Public service

392. The State's responsibility in implementing SPAT is found in the following actions (i) setting up sub sectarian operational strategies in coherence with defined strategic orientations and in consultation with the stakeholders; (ii) organizing a consultation with different actors intervening in rural sector development (iii) creating a favourable environment by improving the legal, regulating and institutional framework; (iv) promoting good governance and support to decentralization activities and especially financial mechanisms; (v) mobilize (financial, material and investments) resources necessary for the achievement of the operational and investment programmes; (vi) to supply public goods and services; and (vii) the monitoring/valuation of the agricultural development process.

# 9.2.7.2. Role of the District jurisdictions.

393. In the framework of SPAT implementation, their role will focus on: ( i ) setting up and implementing operational and investment programmes at the regional level and local development plans; (ii ) participate in the fitting out and management of natural resources in their territorial scope; ( iii ) exercising the working skills in the execution of programmes and soil management projects, local development and decentralized rural development; (iv ) excitement of the consultation scope of the different actors intervening in rural development at local or regional level; ( v) promoting income and employment generating activities; (vi ) Participate in the monitoring/evaluation of the process.

#### 9.2.7.3. Role of grassroots communities

394. In the framework of SPAT implementation, the role of rural population and their grassroots organizations will consist of the following elements: ( i ) formulation of needs regarding development in relation to specific constraints and potentialities; ( ii ) participate in the formulation, implementation and monitoring/evaluation of the operational programmes and investment projects in which they are involved; (iii ) initiate micro- projects relating to local development, soil management or decentralized rural development; ( iv ) exercise working skills in projects execution; (v ) concerted management of natural resources and their soils; (vi) promoting employment and income generating activities; (vii) participating in the monitoring/evaluation of the process.

#### 9.2.7.4. Role of professional organizations and private operators

395. This actors group includes Ridge farmer organizations, professional organization of different production subsidiaries, Regional chambers of Agriculture and private operators. The role of this group of actors in SPAT implementation will consist of (i) participate in formulation and implementation of operational investment programmes (ii) participate in funding some projects (projects co-funding principle at grassroots level); (iii) participate in training, counselling/supporting of different actors; (iv) participate in the consultation of different actors; (v) programmes and projects execution; (vi) participate in the monitoring/evaluation process.

## 9.2.7.5. Role of technical and financial partners (TFP) and the civil society

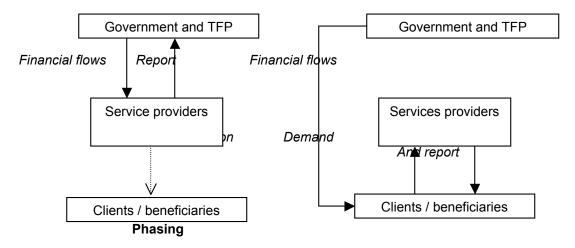
396. This group of actors includes Regional bilateral and multilateral cooperation agencies, Inter-Governmental Organizations (IGO) International NGO or national. In the framework of SPAT implementation, the role of these groups will consist of (I) participate in political dialogue with the Government; (ii); participate in the consultation with the different actors; (iii) support in developing sub-sectarian operational strategies; (iv) support in formulating and implementing operational and investment programmes; (v) availing a competent technical assistance for institutional and operational capacity building of the administration and professional organizations; (vi) participate in resources mobilization for the formulation, implementation and monitoring/evaluation of programmes and development projects; (vii) participating in the monitoring/evaluation.

## 9.2.7.6. Mechanisms for coordination and financing modalities

397. One of the most important lessons of the 4 agricultural development decades is that lack of coordination and synergy between rural development measures have led to significant progress in the agricultural area. Transformation of agriculture and improvement of the situation of peasants or farming communities, requires a set of interventions adapted to ground realities. Isolated measures (such as introducing a new variety, setting up of micro finance or rural feeder roads) are not sufficient alone. There is need for integrated approaches combining different appropriate measures likely to mobilize the participation of all stakeholders in the agricultural sector. This is the reason why the MINAGRI will spare no efforts in establishing partnerships and making cooperation plat-forms at all levels and involve all actors in the planning and implementation process including monitoring/evaluation.

398. Appropriate funding modalities will be very useful to bring about changes and transform today's operating modes. The SPAT plans to put in place agricultural development fund that will be managed by the representatives from different stakeholders. As shown in the chart bellow adapting funding modalities yield a new situation fundamentally different from the conventional financing modalities.

Figure 3: chart of financing modalities



- 399. To consider the gap possibilities between planning and the achievements in implementing the strategy, scenario of progress were defined and a phasing has been worked out. Three trends (low. medium and high) were identified. The downward trend is related to a slow progress similar to the growth observed on the previous four years today. The medium trend is related to an action of medium intensity as far as investment and beneficiaries mobilization is concerned. The third trend (high) is related to high level of investment from the beginning to a maximum mobilization of beneficiaries.
- 400. Three scenarios were defined on each of the trends. (I) The first takes into account a constant growth rate during the whole planning period (2005-2020). (ii) The second scenario supposes two variable rates starting from 2011 to 2020. (iii) The third scenario considers one variable growth rate increasing in 2007 and in 2011.
- 401. Whatever envisaged scenario, it is realistic to think that the sector's "take-off" will be slow in the first phase. During a period of three to five years, efforts should be concentrated on partners and resources mobilization as well as primary investments. It is only during the second phase that results will appear progressively in manifest and by induction lead to acceleration.
- 402. In the same connection, the year 2005 is considered, as a transitional period deserved to shape the strategy and its operational tools; mobilize partners and resources; maintain effective dialogue with grassroots communities and provide them with the necessary support, especially in the reformulation of the Caps, and prepare an MTEF for the period 2006 2008and elaborate linkages which the SPAT will have with the rural development strategy and other support sectors. Special priority will be given to land and commercial issues.
- 403. The year 2005 will be devoted to testing elements of the strategy on three prior identified commodities (tea, rice and milk) to serve as pilot. Therefore, restoring measures already planned on the commodity chains and especially on maize, potato and coffee will be kept on. Likewise, prospecting actions relating to new opportunities for export crops such as pepper, maracuja, cassava flour, banana fruit and tomato will continue.

404. It is obvious that water and soil conservation will benefit from a special programme given its importance. This programme will consist of two phases: an emergency plan (2 to 3 years) and a specific long-term project.

405. The strategy will be accompanied with a monitoring-evaluation system based on the hand board in order to adapt it to the sector's situation in relation to releasing indicators or key indicators; and taking into account the scenario of progress and the whole economy.

## X. SPAT INDICATIVE FINANCING PLAN

- 406. Soon after the adoption of the SPAT by the Government, an indicative financing plan for the SPAT will be elaborated, based on two elements: (i) financing needs identified during the participatory workshops in districts and (ii) projects identified through thematic analyses
- 407. The approach which will be use to finalise the indicative financing plan is based on the following elements: (i) the necessary funds for the 4 programmes and 17 sub-programmes of the SPAT for the period 2005-2008, (ii) the general and annual PIP previsions for the same period (about 103 Million USD), (iii) additional needs of SPAT in case the PIP resources are insufficient, (iv) the amounts of non-disbursed resources for on-going projects in the agricultural sector and new approved projects (estimated at a total of 139.4 Million USD), (v) estimate of the level of private investments in the agricultural sector for the period 2005-2008.
- 408. The SPAT and its financing plan, once approved by the Government, will be a subject for consultations at the donors round table planned to take place before the end of 2004. It will go into application from 2005 with resources already available from on-going projects in the agricultural sector, while mobilising additional resources.

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**PART FOUR: APPENDICES AND ANNEXES**