

RWANDA AGRICULTURAL SECTOR INVESTMENT PLAN 2009-2012

FAO Technical Support Mission (1-12 February 2010)

Aide Memoire¹

A. INTRODUCTION

1. Upon request of the Government of Rwanda an FAO Technical Support Mission² travelled to Rwanda from 1 to 12 February 2010 to assist the Ministry of Agriculture and Animal Resources (MINAGRI) with the format and presentation of the Agricultural Sector Investment Plan 2009-2012 (ASIP). In particular the mission was asked to review the costing of the ASIP and to assist MINAGRI in clarifying the ASIP costing process to the Development Partners (DPs) and the Agricultural Sector Working Group (ASWG).

2. The mission was strongly supported by the FAO Representative, Ms Elisabeth Balepa, who facilitated direct interaction between the mission and the Minister of Agriculture, Ms Agnes Kalibata. The mission worked as one team with the Policy, Planning and Capacity Building Unit (PPCU) of MINAGRI³, as directed by the Permanent Secretary, Mr Ernest Ruzindaza. The mission further met with: (a) the Permanent Secretary of the Ministry of Finance and Economic Planning (MINECOFIN) and Secretary to the Treasury, Ms Kampeta P. Sayinzoga and some of her staff; (b) Development Partners (World Bank, IFAD, USAID, EC, DFID, Netherlands and BTC); (c) producer organizations (ROPARWA, IMBARAGA); and (d) institutions, projects and programmes (CIP, RSSP, OCIR-Café and the IFDC-CATALIST Project).

3. As a result of these meetings the mission obtained a large number of formal and informal documents and electronic with that included relevant data and information. The mission was further informed by a short workshop on ASIP's Program 1, intensification and development of sustainable production systems.

4. The mission attended two ASWG meetings, on 2 and 11 February respectively, both chaired by the Minister of Agriculture. During the first ASWG meeting the mission and its terms of reference were presented. In the second meeting the mission presented its findings as outlined in this Aide Memoire. On 12 February the mission had a wrap-up meeting with the Permanent Secretary of MINAGRI.

5. The mission would like to put on record its appreciation for the support received from all those met and involved in the mission, often at very short notice. It is only thanks to this support that the mission was able to gain the overview and insight required to reach the conclusions and recommendations as presented in this Aide Memoire.

B. BACKGROUND AND CONTEXT

6. In March 2007 Rwanda became the first country to sign a Comprehensive Africa Agriculture Development Programme (CAADP) Compact. Subsequently, the Second Strategic Plan for the Transformation of Agriculture (PSTA-II) was prepared over the period 2007-2008 in close consultation with the ASWG. It covers the period of 2009-2012 and ends at the same time as the Economic Development and Poverty Reduction Strategy (EDPRS). PSTA-II was approved by the Cabinet in October 2008.

¹ Final version of the Aide Memoire (19 February 2010).

² The mission consisted of Frits Ohler, Senior Agricultural Officer, and Jean Risopoulos, Economist, both staff of FAO's Investment Centre in Rome, and was reinforced by Martin Grandjean, Programme Assistant/Emergency Operations of the FAO Representation in Rwanda.

³ In particular the Acting Director PPCU, Mr Damien Byandagara, and his staff including Ms Rhoda Rubaiza and Ms Alexandra Löwe.

7. In November 2008 a Memorandum of Understanding (MoU) was drawn up between the Government and DPs regarding a Sector-Wide Approach (SWAp) in the agriculture sector, to be implemented within the framework of the PSTA-II. MINAGRI is reorganizing its structures to coordinate and oversee implementation of the PSTA-II under a SWAp, this is accompanied by significant capacity building efforts.

8. The ASIP was prepared in October 2009; it lays out the investment requirements of MINAGRI's medium-term strategic plan as formulated in PSTA-II. Both ASIP were subjected to and endorsed by an AUC/NEPAD review in the weeks prior to the December 2009 meeting. In December 2009, Rwanda was again the first country to organize a post-compact CAADP High Level Stakeholder Meeting, to share the progress made and to agree with DPs on the way forward in securing additional resources to finance the ASIP (and PSTA-II). The Government was much praised for the strength of the document. However, the DPs also expressed the need for a fuller understanding of the ASIP, especially with regard to issues related to costing and phasing estimates as well as implementation capacity and modality.

9. Since the MoU, which has been signed by a large group of development partners, states categorically that signatories will align support to the implementation of the PSTA-II, thereby accepting the Government's systems of planning, implementation, financing and monitoring, the request to review costing and related aspects of the ASIP seems somewhat belated. However, though the ASIP may be based on the PSTA-II, the ASIP figures, especially those related to costs, are not identical to PSTA-II figures. In addition, MINAGRI seems to have been eager to be transparent and released draft versions of the ASIP with costing figures that significantly differed from one version to the next, as can be expected from "work in progress".

10. **Conclusion:** though all DPs that signed the MoU want to move ahead with supporting the PSTA-II, apparent costing differences between the ASIP and PSTA-II, and between earlier and later versions of the ASIP, as well as unanswered questions during the December 2009 meeting, prompted some DPs partners to request the Government to review the costing with the assistance of the FAO Investment Centre.

C. FROM PSTA-II TO ASIP COSTING

11. The PSTA-II document includes a Chapter III.2 "Indicative financing for the strategy and its components" (page 108), itself based on more detailed budgets by programme, sub-programme and activity included in its Annex 1 (pages 109-114). These tables formed the basis for the ASIP costing. The mission notes that these PSTA-II budget tables and the accompanying text include some typing errors leading to different figures in different places. The mission also notes that the ASIP preparation team was aware of these typing errors and made some corrections. The following two examples illustrate the point:

- (a) The text under PSTA-II Chapter III.2 states that the total cost of PSTA-II is approximately US\$617 million (incorrect), and Table 12 states that it is US\$885 million (also incorrect), while the ASIP states that it is US\$848 million (correct calculation).
- (b) PSTA-II Table 12 states that Programme 1 budget amounts to US\$448 million (incorrect), and PSTA-II Annex 1 states that it is US\$648 million (also incorrect), while the ASIP states that it is US\$658 million (correct calculation).

12. The ASIP preparation team thus first had to reconstruct the PSTA-II budget outline at the programme and sub-programme levels, and this was done without changing any of the underlying assumptions regarding unit costs, targets or phasing of the different activities.

13. The next step was to establish the actual available and committed funds for the PSTA-II, both on- and off-budget:

- (a) To determine the available and committed on- and off-budget funds by programme and sub-programme, the ASIP preparation team reviewed and analyzed the budgets of 22 projects and programmes, half of which were externally financed and half of which were financed by the Government. These project budgets were apportioned to specific PSTA-II programmes and sub-programmes, according to project components and activities, and by fiscal year. Added to this was an amount of US\$20 million from WFP, which was aligned with the sub-programme on food security and vulnerability management¹ (SP1.6).
- (b) This only targeted the development budget allocation of the sector, excluding the recurrent budget allocations (see below). Figures from the Medium Term Expenditure Framework (MTEF) were considered, but were found to be too low.
- (c) In addition the ASIP team tried to estimate what the private sector (including beneficiary) investment might be that would directly contribute to PSTA-II financing.

14. Based on these data, a calculation was made of the difference between funding needs and identified available funding. This was done by sub-programme, by fiscal year, including three fiscal years: 2009/2010, 2010/2011 and 2011/2012. The sum of available financing is approximately US\$502 million from Government and Development Partners (DP), with an estimated additional US\$21 million coming from private sector and beneficiaries. The gap between the cost of PSTA-II (US\$848 million) and available funding (US\$502 + 21 million), results in a funding gap of US\$325 million.

15. The ASIP is very carefully aligned with the PSTA-II, so much so that changes that occurred in some sub-programmes, where government and development partners seem to have committed funds to levels that exceed the PSTA-II budget indication, are assumed to be corrected downwards. In other words the ASIP assumes that funds that have been allocated to certain “over-subscribed” sub-programmes would instead be used to fund under-subscribed sub-programmes. However, this assumption may be wrong, since the very fact that certain sub-programmes are over-subscribed probably means that they are top priority and that their agreed budget requirements are now higher than they were when the PSTA-II budget was prepared. If this is indeed the case, the actual funding gap could be substantially higher than indicated in the ASIP.

16. The ASIP indicates that there are three sub-programmes where the actual available and committed funds are higher than the funding requirement as indicated in the PSTA-II, for a total amount of about US\$172 million:

- (a) Sub-programme 1.5 (Supply and use of agricultural inputs), has a budget requirement indicated in the PSTA-II of US\$56.7 million, while the total committed amount by Government and DPs is US\$215.3 million, which is US\$158.6 million more than the amount indicated in PSTA-II. This is related to the ongoing implementation of the Crop Intensification Programme (CIP).
- (b) Sub-programme 2.1 (Promotion of farmers organizations and capacity-building for producers), has a budget requirement indicated in the PSTA-II of US\$12.5 million, while the total committed amount by Government and DPs is US\$24.6 million, which is US\$12.1 million more than the amount indicated in PSTA-II.
- (c) Sub-programme 4.2 (Policy and regulatory framework for the sector), has a budget requirement indicated in the PSTA-II of US\$0.3 million, while the total committed amount by Government and DPs is US\$1.5 million, which is US\$1.2 million more than the amount indicated in PSTA-II.

¹ Unlike the 22 projects and programmes that were analyzed, it seemed difficult to indicate how the stated WFP contribution could be attributed to specific programmes, sub-programmes and activities by fiscal year.

17. **Conclusion:** the ASIP costing process has been carefully aligned with the PSTA-II indicative budgets. In the process some errors in the PSTA-II budget seem to have been corrected. However, at the same time this rigorous alignment resulted in a possible underestimation of the funding gap by some US\$172 million. The ASIP preparation team could not review the underlying assumptions of the PSTA-II costing despite having identified some errors there.

D. ANOTHER LOOK AT PSTA-II

PSTA-II within the Overall Sector Budget

18. Information regarding the recurrent budget is missing from PSTA-II, and also from the funding gap calculation in the ASIP. One would expect that including information on the recurrent budget would have a neutral effect on the financing gap, as it would mean increasing the total budget of PSTA-II, but also of the resources available to fund it.

19. The methodology used to determine available Government and DP funding for PSTA-II was based on an analysis of ongoing agricultural projects and programmes (see paragraph 13b above). The total amount calculated to be available was US\$502 million for the three fiscal years of 2009/10 – 2011/12.

20. The mission checked whether this amount of US\$502 million was indeed present in the budget information for 2009/10 and in the estimates available in the MTEF 2009-12 (planned amounts). It appears that the amounts available are only US\$306 million over the same period, of which approximately US\$40 million for the recurrent budget, US\$120 million for the Government development budget, US\$140 million for DP contribution to the development budget, and US\$6 million for the local government agriculture budget (see Annex 1).

21. The discrepancy between the estimated available funds collected by looking at project data and by looking at the MTEF could be due to several reasons. One is that not all projects would necessarily be on-budget or the full amount inscribed there (international technical assistance amounts are not systematically inscribed on-budget by Ministries of Finance). Another could be that Government counterpart funds to external projects are not necessarily captured by the budget.

22. The Rwanda MTEF is a planning tool in which the indicated budget ceilings are, according to the PS of MINECOFIN, an initial reference amount that can be revised upward based on revised Government and DP contributions, which are confirmed when preparing the annual budget. MINECOFIN also emphasized that there was fiscal space to accommodate an increase in the size of the agricultural sector budget in the medium term, even if this meant reducing the growth of expenditure to other sectors.

23. MINECOFIN suggested to base Government contribution estimates on the growth rate of the agricultural budget over the last three years (since 2007). The size of the agriculture budget has increased from US\$32.5 million in 2007 to US\$98 million in 2009/10. This represents an average of 45% growth per annum over the last three years (see Annex 1).

PSTA-II Assessment by Programme

24. The PSTA-II includes four programmes, twenty sub-programmes, seven sub-sub-programmes and 122 activities, many of which are sets of multiple activities. It is beyond the scope of this mission to review all of these in depth. Instead the mission focussed on the main budget items.

Programme 1: Intensification and Development of Sustainable Production Systems

25. Programme 1, with a total funding requirement of US\$658 million, is by far the largest programme in budget terms (77% of the total budget). It consists of six sub-programmes, two sub-

sub-programmes and 40 activities. The mission has issue with sub-programmes 1.1, 1.4, 1.5 and 1.6.

26. ***Sub-programme 1.1 Sustainable management of natural resources and water and soil preservation***, with a total funding requirement of US\$214.6 million, the second largest overall sub-programme in terms of PSTA-II budget requirements. It includes two sets of activities.

27. The first is Activity 1.1a, “construct 50 valley dams and reservoirs with conveyance structures for irrigating 3,570 ha and catchment protection”, with a funding requirement of US\$134.6 million. This is a “multiple-activity” for which it is difficult to define units and costs. It suggests an average of 71.4 ha of irrigated land per dam. If we separate the activity into (a) dam construction, (b) irrigation systems development, and (c) watershed management activities, we can use the following tentative assumptions: (i) average cost of a dam with sufficient storage capacity for 71 ha irrigated, US\$0.75 million¹; (ii) irrigation development, US\$10,000 per ha (see paragraph 30 below); (iii) micro-watershed management activities, US\$0.1 million per dam. The total budget requirements for this activity would then amount to $\{(50*0.75) + (3570*0.01) + (50*0.1)\} = (37.5+35.7+5) = \text{US\$}78.2$ million. Thus, it would seem that the costs of Activity 1.1.a could have been overestimated by US\$56 million.

28. The second is Activity 1.1b, “participatory watershed management plans and protection of [an additional] 20% of the land against erosion via progressive terraces, radical terraces, living barriers, contour planting, shift to crops suitable for erosion control on steeper slopes, etc.”, with a budget of US\$60 million. This is another “multiple-activity” for which it is difficult to define units and costs. With a total land area of 1.46 million ha, the target area for PSTA-II would be 292,000 ha, which is much less than the target as represented in ASIP, which states a target of 852,000 ha. The overall deducted unit cost for this activity is US\$205 per ha, indicating that most of the target is to be covered by relatively light and cheap interventions, such as contour planting. Only modest areas are to be subjected to relatively heavy and expensive interventions, such as terracing. The PSTA-II target seems reasonable; however, the target for this activity seems to have been overstated in the ASIP by some 560,000 ha.

29. ***Sub-programme 1.4 Irrigation development***, with a total funding requirement of US\$243.2 million, is the largest overall sub-programme in terms of PSTA-II budget requirements. It includes five sets of activities, the first two on planning, policy and regulatory issues, the third on the formation and training of Water Users Associations, and the fourth and fifth on irrigation development.

30. Activity 1.4.d, “develop 13,000 ha of hillside irrigation systems”, is costed at US\$222 million. This amounts to a unit cost of US\$17,348 per ha irrigation development, which is surely and over-estimation, and would not appear to be economically justifiable. The new World Bank-supported Land Husbandry, Water Harvesting and Hillside Irrigation Project (LWH) includes a budget of US\$7.45 million to develop 900 ha of irrigated land, which amounts to US\$8,278 per ha. RSSP data indicate unit costs that are lower than that. To be on the safe side, a unit cost of US\$10,000 per ha seems more realistic than the figure that is included in the PSTA-II budget. If we maintain the same target, at 13,000 ha, the total cost would be US\$130 million. Thus, it would seem that the costs of Activity 1.4.d could have been overestimated by US\$92 million.

31. Activity 1.4e, “implement on a pilot basis pressurized irrigation systems on hillside terraces and contours, with fertigation²”, costed at US\$20 million. There are several problems with this activity: (a) there is no indication of the target or area to be covered; (b) the nature of the

¹ This estimate is based on RSSP indications for dams. A dam large enough for about 100 ha irrigated would cost around US\$1 million. There are other ways to make these calculations, but they all come to the same conclusion in terms of budget requirements.

² Fertigation: fertilizing plants through drip-irrigation.

activity suggests that this should either be a pilot research, in which case it is quite costly; or (c) that this would be a commercial venture that should be financed by the private sector; and (d) even if these do not apply, it should instead be considered as a part of Activity 1.4.d, irrigation development, which already has very high targets and unit costs (i.e. the costs of Activity 1.4.e have already been captured under activity 1.4.d). Thus, it would seem that Activity 1.4.e could be the source of a budget over-estimation of US\$20 million.

32. **Sub-programme 1.5 Supply and use of agricultural inputs**, with a total funding requirement of US\$56.7 million, consists of two sub-sub-programmes, the first on “Fertilizer and agrochemical supply and use” (which includes the Crop Intensification Programme, CIP), and the second on “Certified seeds and other inputs”. According to ASIP the Government and DP funding allocations for this sub-programme during 2009-2010 fiscal year amounted to US\$66.3 million, which is more than was foreseen for the whole PSTA-II period. The ASIP estimates for the fiscal years of 2009/2010 until 2011/2012, amount to a total funding allocation of US\$215.3 million, including US\$174.4 million from the Government and an additional US\$40.9 million from DPs. This increase is at least partially the result of higher than anticipated fertilizer prices. Other factors that may play a role are a wider coverage than earlier foreseen, and possibly the inclusion of machinery, such as tractors, in this sub-programme. Funding allocations for this sub-programme may also have been overestimated. The increase in funding allocation indicates that this is a top priority sub-programme. As indicated earlier, the funding requirements for this sub-program as stated in PSTA-II seem to have been under-estimated by US\$159 million.

33. **Sub-programme 1.6 Food security and vulnerability management**, with a total funding requirement of US\$42.7 million, consists of six activities. The total available funding for this sub-programme is estimated at US\$21.5 million, with US\$1.5 million from the Government and US\$20 million from WFP. However the WFP funding does not actually seem to be linked to any of the activities listed under this sub-programme, and therefore may be wrongly attributed to this sub-programme.

34. **Activity 1.6f**, “potable water sources for households”, with a funding requirement of US\$25 million, is to provide 50,000 sources at US\$500 each. It is questionable whether this activity actually figures entirely under the agriculture budget, and it would seem likely that actual available funds for this activity have not been fully captured, and that the actual *agricultural* budget requirement is over-estimated by US\$25 million. Therefore, the *agricultural* funding requirements for sub-programme 1.6 should be revised downwards from US\$42.7 million to US\$17.7 million; and the total available funding should be revised downwards from US\$21.5 million to US\$1.5 million. The sub-programme would then have a very large investment gap in percentage terms, namely 91%.

35. **Programme 1 conclusions:**

- (a) PSTA-II substantially overestimated the funding requirements of two sub-programmes that require fairly intensive engineering and infrastructure works, such as dams and irrigation facilities (SP1.1 on sustainable management of natural resources and water and soil preservation, and SP1.4 on irrigation development), by approximately US\$168 million.
- (b) Another type of overestimation occurs in sub-programme 1.6, food security and vulnerability management, which includes an activity (potable water) that belongs to a different ministry. The associated budget requirement of US\$25 million should not be counted under the budget requirements of MINAGRI.
- (c) PSTA-II substantially underestimates the funding requirements of one sub-programme (SP1.5 supply and use of agricultural inputs) by approximately US\$159 million. Overall programme 1 funding requirements have been over-estimated by $(168 + 25 - 159) = \text{US\$}34$ million.

- (d) The available funds for sub-programme 1.6 as indicated in ASIP have been overestimated by US\$20 million, because the DP funds would not actually be used for the activities stated under this sub-programme.
- (e) It should further be noted that beneficiaries (farmers) and private sector are expected to contribute to different sub-programmes for a total of US\$18.3 million.
- (f) The Programme 1 target for additional erosion control (under SP1.1) is large but reasonable. This target was over-stated in the ASIP by some 560,000 ha. However, the budget requirements were accurately reflected.

Programme 2: Support to the Professionalization of Producers

36. Programme 2, with a total funding requirement of US\$42 million, is one of the smallest programme in budget terms (5% of the total budget). It consists of three sub-programmes and 17 activities. The division between sub-programme 2.1 on farmer organizations, and sub-programme 2.2 on extension services, is not so evident. The whole programme, including research, needs a more comprehensive approach and could also be closer linked to programme 1 on the intensification of production systems.

37. *Sub-programme 2.1 Promotion of farmers' organizations and capacity building for producers*, with a total funding requirement of US\$12.6 million and four activities. The ASIP estimates of Government and DP funding allocations for fiscal year 2009-2010 amount to US\$10.3 million, which is 81% of the amount that was foreseen for the whole PSTA-II period. The ASIP estimates for the fiscal years of 2009/2010 until 2011/2012, amount to a total funding allocation of US\$24.6 million, representing an over-allocation of US\$12.1 million. This may be explained by the difficulties encountered in attributing project and programme contributions to either sub-programme 2.1 or sub-programme 2.2, which has a budget deficit of about US\$12 million.

38. *Sub-programme 2.2 Restructuring proximity services for producers*, with a total funding requirement of US\$15.9 million and five activities. It would be easy to confuse activities under this sub-programme with those under the previous sub-programme, such as Activity 2.2c "implement on farm participatory research-cum-extension approaches such as farmer field schools". The ASIP estimates for the fiscal years of 2009/2010 until 2011/2012, amount to a total funding allocation of US\$3.2 million for this sub-programme, representing an under-allocation of US\$12.7 million. It would appear that in this case the over-allocated funds to sub-programme 2.1 could be used to fund sub-programme 2.2 (or perhaps the two sub-programmes should merge). It should further be noted that private extension agents are supposed to contribute US\$0.6 million to sub-programme 2.2.

Programme 3: Promotion of Commodity Chains and Agribusiness Development

39. Programme 3, with a total funding requirement of US\$128 million, is the second largest programme in budget terms (15% of the total budget). It consists of five sub-programmes, three sub-sub-programmes and 44 activities. Much of the programme is based on underlying existing strategies, such as the Horticulture Strategy and the Rwanda National Coffee Strategy. The ASIP estimates of Government funding allocations for this Programme amount to US\$17.2 million, and the additional DP commitments amount to US\$35.4 million, for a total of US\$52.6. The private sector is expected to contribute US\$56.7 million, but the actual available (confirmed) amount is only US\$1.7 million, so the private sector funding gap is US\$55 million. The overall funding gap of this sub-programme is US\$73.5 million, of which the Government and DP funding gap is $(73.5 - 55) = US\$18.5$ million.

40. *Sub-programme 3.5, market oriented rural infrastructure*, includes seven activities, one of which is Activity 3.5f, "all-weather agricultural market roads", with a funding requirement of US\$10 million. Though rural roads do not normally figure under the agriculture budget, there are

exceptions, such as connecting newly developed high production areas (for instance marshland irrigation and drainage systems) to markets, which is the case here.

Programme 4: Institutional Development

41. Programme 4, with a total funding requirement of US\$19.5 million, is by far the smallest programme in budget terms (2% of the PSTA-II total budget). It consists of five sub-programmes and 21 activities. Though small in budget terms, this programme is essential in building the capacity required to implement the PSTA-II as a whole. It is also the programme where the share of recurrent budget is the largest compared to the other three programmes.

42. *Sub-programme 4.2, the policy and regulatory framework*, with a total stated funding requirement of US\$0.33 million for four activities is apparently over-subscribed. According to ASIP the Government funding allocation is US\$0.4 million, and additional DP support amounts to US\$1.1 million, for a total of US\$1.5 million. This increase is partly the result of an earlier under-estimation of actual needs, and also because it is a very high priority sub-programme. The overall budget requirements for Programme 4 should therefore be increased by US\$1.2 million. This is the only programme for which the funding available in the MTEF is higher than funding requirements estimated in the PSTA-II, the difference being due to the recurrent budget.

43. Conclusions of the PSTA-II programme review:

- (a) The agricultural funding requirements of Programme 1, intensification and development of agricultural production systems, is over-estimated by US\$34 million; and that of Programme 4, institutional development, is under-estimated by US\$1 million; resulting in an overall funding requirement over-estimation of $(34 - 1) = \text{US\$}33$ million.
- (b) The available DP funding for Programme 1 is over-estimated by US\$20 million, which corresponds to WFP potential contribution (information is lacking about the activities that would be funded and whether these fall under PSTA-II).
- (c) The private sector is supposed to contribute a total of $(18.3 + 0.6 + 56.7) = \text{US\$}75.6$ million to Programme 1, 2 and 3, of which US\$1.7 is actually confirmed available. The remaining US\$74 million is part of the funding gap.
- (d) The remaining funding gap that should be provided by the Government and DPs would therefore amount to $(325 - 33 + 20 - 74) = \text{US\$}238$ million; however, ASIP overestimated available Government funds (see below).

PSTA-II Implementation Issues

44. The PSTA-II was designed to cover the four year period from January 2009 until December 2012; it does not refer to the change in fiscal years from the previous January-December cycle to the new July-June cycle. The transition took place in 2009, with a mini-fiscal year from January until June, followed by a new full fiscal year from July 2009 until June 2010¹. It would seem that MINAGRI has decided that the PSTA-II targets should now be reached in three years and six months instead of four years, even though it could be argued that achieving PSTA-II targets in a four year period was already quite ambitious.

45. Human resources and their capacities are a bottleneck for planning and implementation. The ongoing PSTA-II institutional development programme is essential to improve capacities as required, and dozens of staff are currently studying abroad. This, however, has led to acute staff shortages at essential planning and implementation functions. The expectations are that when the

¹ This change of fiscal year from January-December to July-June was done to align with the rest of East Africa Community countries (Kenya, Uganda and Tanzania).

newly trained staff returns, the quality of overall planning and budgeting exercises will substantially improve.

46. A very high share of PSTA-II activities is currently undertaken through central level institutions and projects. However, as decentralization takes hold and local capacities are strengthened, a larger share of activities should be undertaken through local authorities, and this should increasingly be reflected in budget allocations and flow of funds.

47. The SWAp modality implies that more detailed planning and budgeting be done on an annual basis, through a process involving dialogue between the Government and DPs as well as other stakeholders. The figures planned for Government contribution in the PSTA-II and the MTEF will have to be reconciled when preparing the annual budget, and donors will also have to confirm their commitments on an annual basis. Dialogue on monitoring and evaluation needs to build on what is already done, such as the Joint Sector Reviews, and DPs need to clearly spell out their information requirements that the Management Information System (MIS) is supposed to provide.

48. The SWAp implementation modality document (December 2009) provides further details on how the PSTA-II will be implemented. The proposed structure includes a small central ministry with essentially a planning and financial management unit, a SWAp coordinator supervising four programme managers and their staff – one for each programme – and the two recently restructured boards, the Rwanda Agriculture Board (RAB) and the National Agricultural Exports Board (NEB). These boards are supposed to be the implementing bodies for the PSTA-II. The exact share of responsibilities between these various components is described in detail but would nevertheless require more clarification, as it seems to create a new layer or structure between the agencies, regrouped in boards, and the Ministry. The document also foresees setting-up steering committees at programme level, and each programme manager having M&E procurement and financial management staff.

49. A more practical approach might be to have a SWAp secretariat in the planning department, have the RAB in charge of programmes 1 and 2, and the NEB in charge of programme 3. Programme 4 could be managed by the Planning and Capacity Building Unit of MINAGRI. The role of districts with respect to the boards could be more clearly spelt out, and they should also be targeted for capacity building activities. There should be only one steering committee for the whole PSTA-II, chaired by the Minister or the PS, and this should be the existing management MINAGRI forum. Embarking on a SWAp does not mean creating a whole new set of institutions, but working with existing ones and strengthening their capacity. This would mean strengthening the capacity of the financial management, procurement and planning units at MINAGRI and in the boards, as well as in the districts.

E. RECALCULATING THE PSTA-II/ASIP FUNDING GAP

Funding Needs

50. The PSTA-II budget figures do not include the recurrent budget of MINAGRI. This needs to be added prior to any other consideration. The recurrent budget over the period considered is estimated at US\$56 million. This amount was estimated by extrapolating the 2009/10 recurrent budget figure (US\$12.3 million) to 2011/12 by using the same rate of increase as experienced over the previous 3 years (45% p.a.), and adding the three budget years. The total funding requirement therefore increases from US\$848 to US\$904 million (see Annex 1).

51. The next step is to remove PSTA-II budget lines that do not in principle belong to MINAGRI expenditure, but belong to different ministries, or should be covered by the private sector. These include the US\$25 million potable water activities, which belong to a different ministry. Amounts to be financed by the private sector and beneficiaries also need to be removed. These correspond to approximately US\$75 million, as identified in ASIP. The remaining

agriculture budget requirement is therefore reduced by $(25 + 75) = \text{US\$}100$ million, from US\$904 million to US\$804 million.

52. Finally, as we have seen above, certain changes between programmes and sub-programmes lead to a further overall saving of approximately US\$8 million (US\$ 9 million reduction in Programme 1, and US\$1 million increase in Program 4). The remaining budget requirement is therefore reduced from US\$804 million to US\$796 million, to be financed by Government and DPs over the period from 2009/10 to 2011/12.

Available Funds

53. Regarding the amounts available from the Government and external partners, one needs to consider the amount available in the MTEF, which is US\$306 million (Annex 1). This amount needs to be revised upwards to take into consideration past increases in Government recurrent and development expenditure, based on growth over the last three years. If one applies the same growth rate (45% p.a.), Government resources increase by approximately US\$80 million to US\$386 million (additional US\$18 million for recurrent budget, US\$59 million for development budget and US\$3 million for Local government budget).

54. The next step is to add the amount of externally financed projects that do not seem to be present in the MTEF for the period of 2009-12. ASIP estimates the total available DP funds at US\$245 million, from which the US\$20 million from WFP needs to be subtracted. The MTEF estimates DP funding at US\$140 million. The difference of $(245 - 20 - 140) = \text{US\$}85$ million, is then added to the revised estimate of available Government and DP funds, $(386 + 85) = \text{US\$}471$ million.

Funding Gap

55. Therefore, with revised PSTA-II requirements of US\$796 million, and revised Government and DP funding availability of US\$471 million, the recalculated Government and DP funding gap amounts to $(796 - 471) = \text{US\$}325$ million, apparently the same amount that was indicated in the original ASIP calculations, but derived through a significantly different calculation method. However, the funding gap reported in ASIP included a US\$55 million private sector funding gap, while the recalculated funding gap excludes the private sector funding gap.

Table 1. Revised calculation of the PSTA-II/ASIP Government and DP funding gap.

GoR/DP Funding Needs		GoR/DP Available Funds	
Description	US\$ million	Description	US\$ million
Original total	848	Projected amount in MTEF	386
Plus projected recurrent budget	+56	consisting of:	
Minus potable water	-(25)	GoR recurrent budget	56
Minus private sector and beneficiaries contribution	-(75)	GoR development budget	180
Minus over-estimation of Programme 1 costs	-(9)	Local gov. agric. budget	10
Plus under-estimation of Programme 4 costs	+1	DP development budget*	140
Revised funding needs	796	Plus donor ongoing funding not captured in MTEF	+85
Minus revised available GoR/DP funds	-(471)	consisting of:	
Recalculated funding gap	325	Amount in ASIP	245
		Minus WFP	-(20)
		Minus amount in MTEF	140
		Revised available funds	471

* Actual DP budget (not projected DP budget)

56. This funding gap of US\$325 million will need to be financed exclusively by external partners, as the Government contribution has already been taken into account, and private sector as well as beneficiaries activities have been removed from the total that needs to be financed. Taking into account the projected but not yet confirmed Government increase in agricultural spending (US\$80 million) as well as the private sector funding gap (US\$55 million), results in an overall funding gap of $(325 + 80 + 55) = \text{US\$}460$ million.

F. RECOMMENDATIONS

57. The mission is of the opinion that despite the various inconsistencies, overestimations, underestimations and misalignments noted above, the PSTA-II costing provides a reasonable basis for the Government and DPs to commit funds to the sector over the medium term, from 2010 to 2012.

58. It is recommended that the Government confirms its commitment to increase spending in agriculture over the period of 2009-2012, tentatively calculated to be an additional US\$80 million (including local government agriculture spending) compared to the current MTEF.

59. Partners were widely consulted during PSTA-II preparation and by signing the MoU endorsed the document that in the mean time had been approved by Cabinet. PSTA-II is already under implementation. It is therefore important to consider that the PSTA-II, though not perfect, is the basis against which to plan and budget annually, through an open, transparent and constructive dialogue between MINAGRI and its partners.

60. Overall planning, implementation and monitoring arrangements are still more project than program oriented. This needs to change when moving towards a SWAp modality. It is recommended to improve annual planning and budgeting of PSTA-II and to reconcile against MTEF. It is further recommended that a (smaller) SWAp group including MINAGRI directors and SWAp donors discuss the preparation of annual work programs and budgets.

61. The focus should now be on implementing the PSTA-II and making progress in moving towards a SWAp modality. This will be a long process and MINAGRI should welcome the support of technical assistance in this field. MINAGRI and its partners could learn useful lessons on SWAp preparation and implementation from other sectors in Rwanda and from other experience with Agricultural SWAps in Africa, such as Tanzania, Mozambique, Uganda and Ghana.

62. The mission also advises that some of the features related to PSTA-II implementation and monitoring arrangements be reconsidered; and the practicality of implementing and monitoring the PSTA-II through additional layers, such as the Programme Management units and steering committees for each programme be analyzed. An alternative would be to work with and strengthen existing structures, which is the approach usually favoured by SWAps.

63. The mission recommends that lessons are learnt from the process of preparing PSTA-II and that these are taken into account when preparing PSTA-III, which should start in 2011. In particular, enough time should be set aside to discuss targets and costing, not just with external partners but also with MINAGRI technical and decentralized staff, so that there is sufficient ownership regarding the objective, results and content of the programme.

64. Finally, as decentralization takes hold and local capacities improve, activities should be increasingly planned and implemented by local government, and local budgets should reflect this.

ANNEX 1: BUDGET AND FUNDING ESTIMATES

I. Agriculture in the Mid-Term Expenditure Framework

1. Agricultural expenditures are subdivided by Programme, as well as by Government recurrent, Government development, DP (contribution to the development budget), and local government (districts) budget. The agricultural budgets of previous full fiscal years from January to December 2007 and 2008, and the transitional mini-fiscal year of January-June 2009 are detailed in Table 2 (see next page), while a summary is included in Table 1 (this page). These tables also include the current budget over the new fiscal year of July 2009 – June 2010, as well as current estimates for fiscal years 2010/11 and 2011/12. These tables are based on budget figures as provided to the mission by the MINECOFIN, such as the Budget Framework Paper 2009/10-2011/12, which includes the Mid-Term Expenditure Framework (MTEF). Amounts in national currency (Rwanda Franc, RWF) were converted into US Dollars at the annual fixed exchange rate used by MINECOFIN in its budget framework paper document. The current MTEF covers the three fiscal years of 2009/10 – 2011/12. Rwanda is not yet using rolling MTEFs.

2. Total spending increases significantly from year to year. The share of the agricultural budget with respect to total expenditure has also increased significantly over the last three years, from 3.4% in 2007 to almost 6.8% in the current fiscal year (Table 1, Figure 1). The agricultural budget does not include amounts spent on agriculture at local level (districts). These only represent 3% of total agricultural expenditure (Table 2).

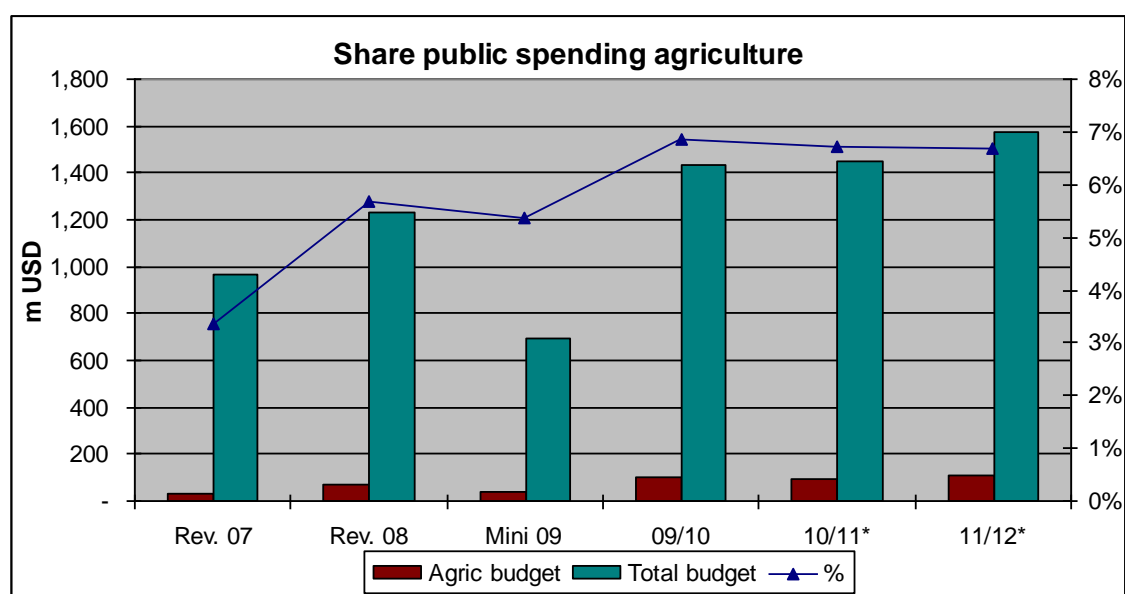
3. These amounts are all planned expenditure, and do not necessarily represent realised expenditure, although past implementation reports of the sector show that, in the case of Government resources at least, committed resources are fully spent (almost 100% execution rate).

Table 1. Share of agriculture spending – Summary (in US\$ million)

	Rev. 07	Rev. 08	Mini 09	09/10	10/11*	11/12*
Agric budget	32.59	69.99	37.16	98	97	105
Total budget	967	1,234	692	1,433	1,446	1,572
%	3.37%	5.67%	5.37%	6.84%	6.72%	6.70%

Source: MINECOFIN, Budget Framework Paper 2009/10-2011/12

Figure 1. Share of agriculture spending over total spending (%)



Source: MINECOFIN, estimates are marked with an asterisk

Table 2. Previous, Current and Future Agricultural Budget (as estimated in MTEF) – Detailed (in US\$ million).

		Previous budget			Current budget	MTEF estimates		
		Rev. budget 07	Rev. budget 08	Mini budget 09	09/10	10/11	11/12	TOTAL 09-12
P1	GoR Rec	817,828	3,002,208	1,100,400	3,698,248			
	GoR Dev	8,138,547	29,876,210	7,701,696	35,500,289			
	DP	4,544,999	16,684,468	9,240,678	25,699,379			
	Total	13,501,374	49,562,886	18,042,773	64,897,917	66,880,654	73,481,390	205,259,961
	Districts				1,834,710	2,020,732	2,267,812	6,123,254
P2	GoR Rec	2,254,846	3,590,976	11,246,179	3,704,838			
	GoR Dev	390,284	621,551	1,173,101	807,760			
	DP	1,217,222	1,938,498	88,183	3,539,081			
	Total	3,862,352	6,151,024	12,507,464	8,051,679	4,631,935	5,056,176	17,739,790
	Districts				270,845	297,900	334,249	902,993
P3	GoR Rec	798,058	845,120	414,173	1,068,237			
	GoR Dev	1,087,460	1,151,589	1,763,952	3,453,342			
	DP	9,632,783	10,200,833	3,093,896	11,359,382			
	Total	11,518,301	12,197,541	5,272,021	15,880,960	15,980,314	16,325,067	48,186,342
P4	GoR Rec	1,645,929	920,318	495,618	3,876,376			
	GoR Dev	342,456	191,484	311,367	76,100			
	DP	1,722,937	963,377	531,134	5,260,360			
	Total	3,711,322	2,075,179	1,338,119	9,212,835	9,689,448	10,398,653	29,300,936
Σ	GoR Rec	5,516,661	8,358,622	13,256,371	12,347,699			
	GoR Dev	9,958,748	31,840,832	10,950,115	39,837,491			
	DP	17,117,940	29,787,176	12,953,891	45,858,202			
	Total	32,593,349	69,986,630	37,160,377	98,043,392	97,182,351	105,261,286	300,487,029
	Districts				2,105,555	2,318,632	2,602,060	7,026,247
	w distr				100,148,947	99,500,982	107,863,346	307,513,276
Total Spending		966,981,685	1,234,387,412	691,557,908	1,432,788,413	1,446,361,642	1,571,739,262	

II. PSTA-II Programmes and Budgets Compared with MTEF

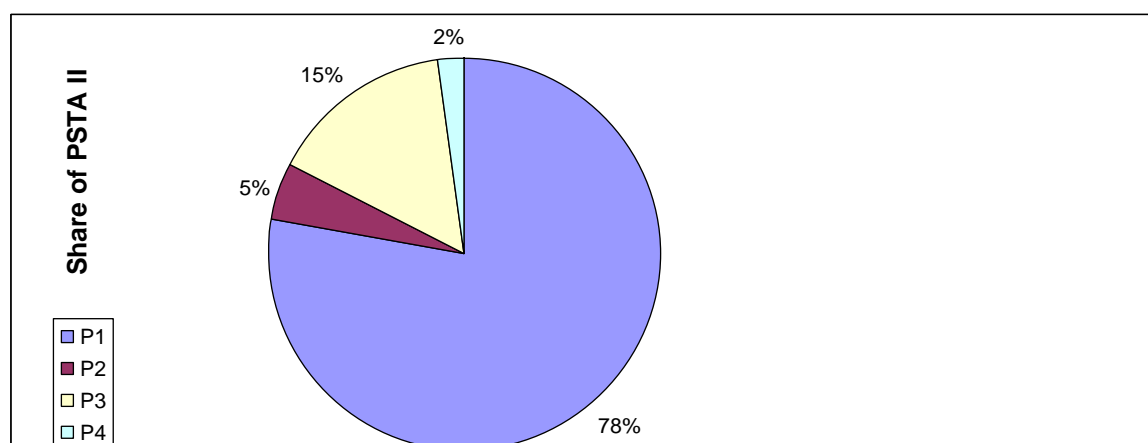
4. The PSTA-II (and therefore ASIP) includes four programmes with a total budget requirement estimated at US\$848 million (Table 3 and Figure 2).

Table 3. Budget share of Programmes according to PSTA-II document.

	US\$	%
P1: Intensification and development of sustainable production systems	658,823,771	78%
P2: Support to the professionalization of producers	41,950,157	5%
P3: Promotion of commodity chains and agribusiness development	127,822,126	15%
P4: Institutional development	19,520,000	2%
TOTAL	848,116,054	100%

Source: PSTA II document

Figure 2. Relative budget share of Programmes according to PSTA-II document.

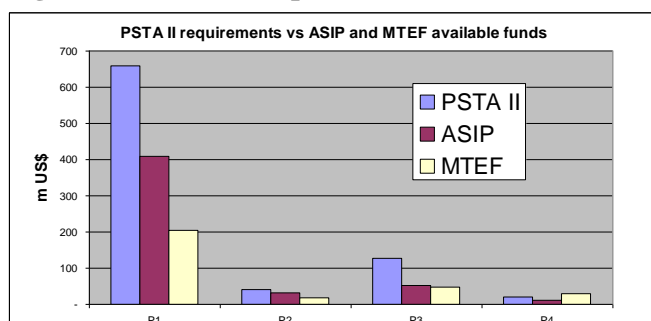


5. The amount of funds estimated to be available as presented in the ASIP document, was computed by adding up budgets from 22 on-going projects, 11 of them exclusively funded by the Government and 11 funded mainly by DPs. Comparing ASIP funding availability estimates with amounts on-budget reveals that the former is overestimated by 200 million US\$ over a three year period, 2009/10-2011/12 (Table 4 and Figure 3).

Table 4. PSTA-II funding requirements, compared with ASIP and MTEF estimates of available Government and DP funds.

	PSTA-II Requirements	ASIP Estimates	MTEF Estimates
Programme 1	658,823,771	408,288,794	205,259,961
Programme 2	41,950,157	30,739,972	17,739,790
Programme 3	127,822,126	52,625,610	48,186,342
Programme 4	19,520,000	10,330,145	29,300,936
Total	848,116,054	501,984,522	300,487,029

Figure 3. PSTA II requirements versus ASIP and MTEF available funds



III. Recalculating Expected Government Commitment to PSTA-II over MTEF Period

6. However, the mission was informed by the PS of MINECOFIN that the MTEF estimates were an initial reference that could – and most likely – would be revise upward. The PS advised to make a projection of expected agricultural expenditures based on past increases. Based on this advise, the following approach was used to recalculate the amount that the Government of Rwanda will invest in the agriculture sector over the next two years.

7. The growth rate of Government spending over the last three years was calculated based on the average annual growth rate (AAGR) of past commitment amounts of Government contribution, recurrent plus development. The formula used is the following:

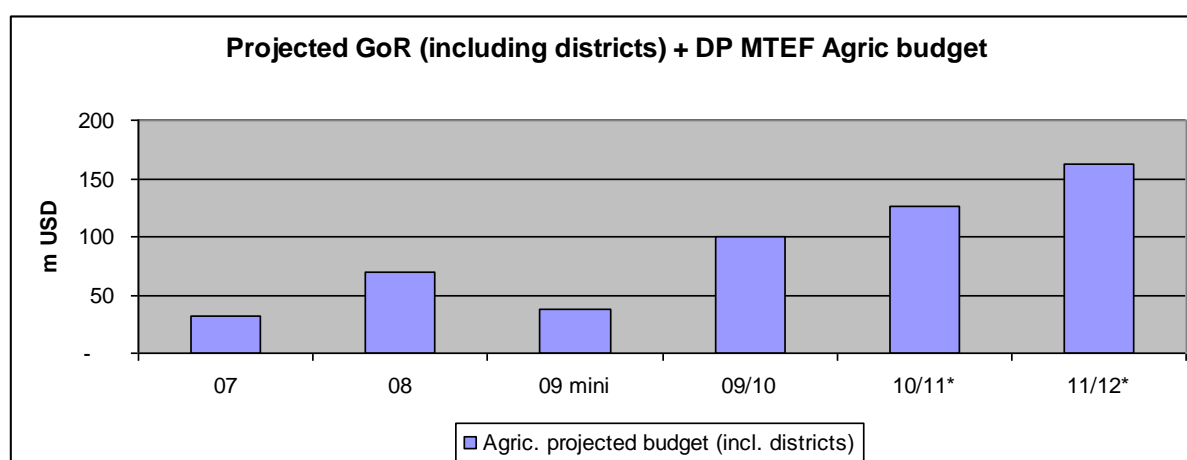
$$AAGR\% = \left(\sqrt[n]{\frac{\text{final amount}}{\text{initial amount}}} - 1 \right) * 100.$$

8. By applying this formula to spending increase between 2007 and 2009/10 one arrives at 45% average annual growth rate. Extrapolating that growth rate on a linear basis over the next two years, to obtain projected GoR future commitments, results in an estimation of approximately US\$80 million additional agricultural spending by GoR (excluding possible addition DP contribution) during the current MTEF period (Table 5). The projected trend including existing estimated DP contributions according to MTEF (but excluding possible addition DP contributions) is presented in Figure 4.

Table 5: Expected additional funds to be provided by the Government, based on previous trend (in US\$ million).

	Initial	45% p.a.	Increase
GoR Rec	37.8	56.2	18.4
GoR Dev	122.1	181.4	59.3
GoR Tot	159.9	237.6	77.7
DP Dev	140.5	140.5	-
TOTAL	300.4	378.1	77.7
District	7.0	9.6	2.6
GD TOTAL w/ districts	307.4	387.7	80.3

Figure 4: Projected trend of Government expenditures in agriculture, including districts, with DP amounts as in MTEF.



NB: the revised projected amounts are marked with an asterisk (*)