

NIRD; RKVY Monitoring Unit

Analytical Report on Gujarat SAP

1. Name of the State

Gujarat

2. What target the State decided to achieve using RKVY assistance during 11th Five Year Plan (FYP) for the agriculture sector as a whole and for the sub sectors?

The SAP decides specific targets to be achieved for various activities under agriculture & allied sectors using RKVY assistance during 11th Five Year Plan (FYP). For the crop-sector, it targets to bring 20 per cent of area under major food and cash crops (which is equivalent to 882451 ha (hectare) and 855369 ha areas under food and cash crops, respectively) as on 2007-08 under *High Yielding Varieties* (HYV) during the FYP. Further, the SAP targets to revive existing 23 *Taluka Seed Farms* and open 194 new *Seed Farms* for multiplying the breeder seeds procured from ICAR into foundation seeds, with ultimate objective of increasing the production of major food and cash crops by 50 per cent. To promote *Agriculture Mechanization*, the SAP proposes to give 50 per cent subsidy on a number of agricultural implements, besides establishing agricultural implements workshop for repair of farm implements and training of extension officers. Under *Soil Health*, the SAP targets to cover 12,39,008 small and marginal farmers under *Soil Health Card* scheme during the 11th FYP. The SAP targets to double the annual capacity of existing 20 soil testing laboratories from 1.90 lakh soil samples at present to 3.80 lakh soil samples; and set up new soil testing laboratories in 7 districts that lack the facility, with total collective testing capacity of 84,000 samples annually, during the FYP. As part of *Integrated Development of Wasteland Area and Waste Land*, the SAP plans to use 3,55,622 ha of waste/degraded land for various watershed and land development activities over a period of 4 years. Under *Integrated Pest Management*, 40-41 farmers per village are to be selected for training of pest management from all 18309 villages in the State. Under *Non-farm activities* the SAP proposes to set up 224 agri clinics and 1130 rural business centres. As part of *Marketing Development*, the SAP targets to organize 12,39,008 small and medium farmers of the State into 1,38,200 SHGs/farmers' clubs, to be involved in marketing activities of their farm products; 1 *Collection Centre* per 100 SHG is proposed. Under *Horticulture* sector, the SAP targets to impart training on micro-irrigation system to 13,820 Self Help Groups (SHGs)/farmers' clubs involving 12,39,008 small and marginal farmers in the State; 230 small sized nurseries of 1 ha area are planned to be established and 12 existing horticulture nurseries in the State are to be strengthened. The *Animal Husbandry* sector is targeted to grow HYV of sorghum or other good quality fodder in 1,76,646 ha of pasture land; to supply 10 cattle each to 21,810 SHGs/farmers' clubs comprising of small and marginal farmers; and to generate 1,20,38,236 quintals of vermin compost annually by creating 91635 farmers' groups in the villages. *Gujarat Agro Industries Ltd.* proposes to set up integrated pack house for fruits & vegetables with installed capacity of 6000 tons per annum (TPA) for fruits and 3000 TPA for vegetable processing and packing; ripening chambers with a capacity of 1500 MT/annum and cold storage with capacity of 300 MT. Under *Agriculture Marketing*, the SAP proposes to set up 20 cold storage facilities, 121 godowns, 74 solid waste disposal facilities and strengthening 33 new market yerds. The SAP plans to set up multi commodity cleaning facilities at 8 Agro Produce Marketing Committees (APMCs), create export facilities for fruits and vegetables at Junagadh, Kutch and Narmada/Valsad, and provide *pucca* platform facility at 11 APMCs. For the *Fisheries* sector, the SAP plans to install FISH

FINDER system in 1250 fishing vessels; to provide bio-metric cards to 1 lakh fishermen during 2008-09 out of total of 5 lakh fishermen in the State; to form 1000 fishery co-operative in 350 villages of Junagadh district and a fishery training centre; PEL rearing of IMC fish seeds in 37 reservoirs of Junagadh district; and supply of 40 FRP boats to fishermen/groups.

3. Which method (Method 1 or Method 2) is used for the preparation of SAP? How integration (methodology) of C-DAPs and prioritizing major interventions was done to prepare SAP?

The SAP is not explicit on the method followed (Method 1 or Method 2) in its preparation. It is not explicit whether the State *Nodal Agency/Agriculture Department* has taken the draft DAPs from the districts at the first instance to ensure appropriate capture of the State's priorities w.r.t. agriculture and allied sectors in the C-DAPs so that their integration in to the SAP meet priorities, targets and resources of the State (Method 1), or that it has conveyed to the districts in the first instance, the State's priorities, targets and resources that are also ought to be reflected in the respective district plans (Method 2). Further, the SAP is not explicit on how integration (methodology) of C-DAPs and prioritizing major interventions has been done to prepare SAP. However, the SAP states that it involves a consolidation of projects/activities of DAPs of 26 districts, decided by the State to be included as part of the State Plan. The SAP mentions that participatory approach involving various stakeholders has been used in planning from village (grass root) level to State level. The SAP states a number of problems/issues pertaining to agriculture and allied sectors that have emerged during detailed discussions between farmers/*Gram Panchayat* and village/taluka/district/State level officials, involving all 18309 villages in the State. Besides this, the SAP also mentions about conducting *Focused Group Discussions* in the villages, substantiating the collected quantitative information with the qualitative information.

As per the Planning Commission guidelines, the uniqueness of districts has been kept in view while proposing allocations for various schemes under different sectors. For example, the C-DAP of *Bhavnagar* district (affected by salinity ingress being a coastal district) proposes project on *soil & water conservation* that focuses on prevention of salinity ingress, reclamation of soil, development of waste land, afforestation, construction of checkdams and other harvesting structures. The SAP covers the *Bhavnagar* district under two proposed *Land Development* projects, viz. *Checking of Salinity ingress in Coastal Area of Gujarat State* and *Reclamation of Degraded Bhal Area to increase Agriculture Production*, though it leaves-out the district in other *Land Development* projects, i.e. *Reclamation of Ravine Area to increase Agriculture Production in the State*, *Reclamation of Saline & Alkaline soil to incase Crop Production*, *Rainfed Area Development through integrated Watershed Development in Tribal Area of the State for Sustainable Agriculture*, *Rainfed Area Development through integrated Watershed Development in Non Tribal Area of the State for Sustainable Agriculture* and *Hill Area Development for increasing Agriculture Production in Tribal Belt through Land base activities*.

4. Whether SAP has critically analyzed and clearly stated the agricultural situation of the state vis-à-vis its districts through a SWOT analysis covering agro-climatic conditions, natural resources, infrastructure, institutions, technologies, manpower etc

The SAP has attempted to analyze and state the agricultural situation of the state through a SWOT analysis. The major strengths include, a high 60.62 per cent of State's geographical area is under cultivation; soil in most part is neutral with pH value between 6.5 to 7.5, low electricity conductivity, low to medium soil content of carbon, nitrogen and phosphorous; fertile land for a variety of crops viz *Castor, Cotton, Wheat, Pukses, Cumin, Onion, Garlic, Sugarcane, Mango* etc.; 4

State Agricultural Universities, and many reputed agricultural institutions like *Regional Research Station of Cotton, Wheat and Sugarcane* and *National Research Centre of Groundnut*. The weaknesses include, low level of irrigation (36 per cent) with 64 per cent of cultivated land involves rain-fed farming; only 10 per cent of geographical area under forest cover, posing ecological challenge; lack of farmers' training programmes and inadequate utilization of training facility; problem of saline soil in coastal districts of *Junagadh, Porbunder, Amreli, Bhavnagar, Jamnagar, Valsad, Navasari* and *Bharuch*; poor record in terms of cooperatives and group activities; insufficient number of agro-units for value-adding the harvests to fetch remunerative market prices; and marketing facility is available with respect to primary agriculture only in most part of the State. The opportunities include, part of the roughly 40 per cent land that is not under-cultivation; micro-irrigation system and bore-wells present irrigation opportunities for 64 per cent of the rain-fed cultivated area; massive scale tree plantations under the social forestry scheme; opening a *taulka seed farm* in each *taluka*; manufacture of organic manures from cattle dung (*gobar*)/organic waste; cultivation of leguminous plants (pulse); and IEC programme may be organized for making people/farmers aware about developments in agriculture & allied sectors. The only threat that the SAP mentions is that of unawareness of people about various government schemes including RKVY.

5. Whether Convergence- inter and intra department/programmes- been attempted and what is the extent of convergence? Have all potential options for convergence been identified and explored?

The SAP gives instances of attempting convergence- inter and intra department/programmes. For example, both to expedite an ongoing *soil health card* programme (running since 2003-04 and targeting to make available the soil health cards to 38 lakh farmers of the State) and to meet the eleventh FYP target of covering 12,38,008 small & marginal farmers of the State under *Soil Health Card* scheme (Rs 37.17 crore), the SAP proposes RKVY project *Strengthening of Existing Soil Testing Laboratories* (Rs 7.19 crore). In another instance, the proposed project *Agri Business Centres* targets the setting up of 1130 rural business centres at a unit cost of Rs 5 lakh each; the Plan proposes an assistance of Rs 20.83 crore for the project (under RKVY) and Rs 1.67 lakhs per unit of *Business Centre* for motivating *Agri entrepreneurs* (RKVY). The SAP expects the *Agri Business Centres/Agri entrepreneurs* to mobilize the remaining funds required for the project through their own resources or seeking loan from the bank under *Swarna-Jayanti Gramin Swarozgar Yojna* (SGSY) or other schemes. In yet another example, the SAP proposes integration of the project *Supply of hybrid Cattle* with SGSY. Under SGSY, there is a subsidy provision for supply of cattle to promote self employment, in group mode (Self Help Group mode). To expedite the success of the ongoing scheme, the SAP proposes to supply 21,810 SHGs/farmers' clubs with 10 cattle each at an estimated cost of Rs 2.5 lakh per SHG under the FYP with an additional subsidy of 25 per cent of the unit cost; total project cost is Rs 551.46 crore while proposed subsidy support under the Plan is Rs 137.87 crore. The SAP envisages mobilization of remaining funds from bank under SGSY. Another project *Pilot Project – Animal Hostel at Akodara Village, Himmatnagar*, aiming to produce *gobar* (cattle-dung) gas and vermi compost with a project cost of Rs 5.30 lakhs, has been proposed a contribution of Rs 3.60 crore under RKVY during 2009-10; cattle owners are expected to partially bear the cost of the project in tune of Rs 50 lakhs.

However, the SAP gives limited evidences of following the convergence. The SAP misses to give details on share of funding between RKVY and other sources, creating difficulty in assessing the extent of convergence. Hence, the extent of convergence is limited and not clearly explicit.

Further, we cannot make out from the SAP that whether all options for convergence have been identified and explored.

6. Has the experience of on-going CSS and state schemes been studied and lessons learnt have been incorporated in SAP/C-DAPs for replication/ expansion/ modification in uncovered areas?

We do get some evidence in the SAP indicating that the experience of on-going CSS and state schemes has been studied and lessons learnt have been incorporated in SAP for replication/ expansion/ modification in uncovered areas. For example, the SAP proposes to outsource the activities under proposed project *Formation of SHGs/Farmers Club* (Rs 134.54 crore) to a third party after it learns that giving the task of SHGs formation to the *Gramsevak*s has proved to be ineffective in the past. Further, the SAP proposes a project *Third Party Monitoring & Evaluation* as it realizes from the experience that a majority of programmes remain unmonitored, outcomes are not evaluated and the impact of programmes is not known. Similarly, learning from the slow pace of success of an SGSY programme on promotion of self-employment through a subsidy provision for supply of cattle (possibly marred by the low-level of subsidy provision), the SAP makes provision of an additional subsidy of 25 per cent of the unit cost under project *Supply of Hybrid Cattle* to boost the activity during the FYP. However, the SAP does not give many instances that support the given argument.

7. Whether the yield gaps and returns in different crops/livestock/fisheries have been estimated?

A systematic estimation of the yield gaps and returns in different crops/livestock/fisheries is not explicit in the SAP. However, the SAP does indicate about estimating the yield gaps and returns of some major food-grain crops such as wheat, *bajra* and pulses. It gives yield gaps of 500 to 1000 kg/ha for wheat (productivity being 3000 to 3500 kg/ha vis-à-vis frontline demonstration figure of 4000 kg/ha), 1300 kg/ha for *bajra* (productivity being 1700 kg/ha vis-à-vis 4000 kg/ha by HYV) and 300 kg/ha for pulses (productivity being 600 kg/ha vis-à-vis 900 kg/ha by HYV).

8. How the technological and agronomic gaps were identified to contribute to yield gaps?

It is not explicit in the SAP that how the technological and agronomic gaps are identified to contribute to yield gaps. However, we may infer the role of information/data collected through participatory approach involving various stakeholders, from village to State level, during the planning process of the SAP/C-DAPs, along with the SWOT analysis, in identifying technological and agronomic gaps.

9. How the identified constraints are adjudged responsible for low crop productivity in general and specific crops in particular? Is it an opinion or stated on the empirical basis?

The SAP is not explicit on how the identified constraints are adjudged responsible for low crop productivity. However, we may infer the role of information/data collected through participatory approach involving various stakeholders, from village to State level, during the planning process of the SAP/C-DAPs, along with the SWOT analysis, in adjudging the identified constraints responsible for low crop productivity. It is not explicit whether it is an opinion or stated on the empirical basis.

10. How the interventions are identified to bridge the gaps in productivity levels?

It is not explicit in the SAP that how the interventions are identified to bridge the gaps in productivity levels. However, we may infer the role of information/data collected through participatory approach involving various stakeholders, from village to State level, during the

planning process of the SAP/C-DAPs, along with the SWOT analysis, in identifying the interventions to bridge the gaps in productivity levels.

- 11. Whether the right strategies have been prioritized to bridge the yield gaps in crop/livestock/fisheries and maximize returns to farmers have been clearly spelt out? Whether the empirical basis for appropriate strategies provided? How far they have been obtained/decided through a consultative process with all the relevant stake holders?**

The SAP attempts to give specific and clear strategies under the proposed projects. However, a systematic prioritization of strategies is not explicit in the SAP. It is not explicit whether an empirical basis for appropriate strategies has been provided. Though the SAP is not explicit on how far the strategies have been obtained/decided through a consultative process with all the relevant stake holders, yet the fact mentioned in the SAP that information has been collected through participatory approach involving various stakeholders, from village to State level, during the planning process of the SAP/C-DAPs, indicate involvement of a consultative process.

- 12. Whether the prioritized strategies have been translated into programmes/projects/activities by sectors and years with clear cut objectives, targets, output, outcome, funding (RKVY, other sources) for each project? Whether the viability of each project to achieve the expected output considered?**

The SAP attempts to translate the strategies into projects by sectors and years along with funding for each project; the text of the SAP also indicates about its attempts to provide targets and outcome for some major projects. However, it misses to provide objectives, targets, output, outcome and break-up of funding across years for all the projects. Further, the SAP is not explicit whether it has considered the viability of projects to achieve the expected output.

- 13. Have border areas/ insurgent areas/problem areas (mining, acidic soils etc) have been addressed by formulating any specific projects?**

The SAP addresses problem areas of the State through a number of projects such as *Checking of Salinity ingress in Coastal Area of Gujarat State, Reclamation of Ravine Area to increase Agriculture Production in the State, Reclamation of Degraded Bhal Area to increase Agriculture Production, Reclamation of Saline & Alkaline soil to increase Crop Production, Rainfed Area Development through integrated Watershed Development in Tribal Area of the State for Sustainable Agriculture, Rainfed Area Development through integrated Watershed Development in Non Tribal Area of the State for Sustainable Agriculture and Hill Area Development for increasing Agriculture Production in Tribal Belt through Land base activities*, as part of the Land Development & Watershed activities amounting to a total provision of Rs 646.88 crore under the FYP.

- 14. What is the mismatch (difference between estimated budget in SAP/C-DAP and the approved and used budget) between the projections and funding in SAPs/C-DAPs and the projects (difference between planned projects in SAP/C-DAP and approved projects and funding being implemented? How this mismatch affects the targets, expected outputs/outcomes/growth impact?**

The SAP proposes a total budget of Rs 2485.42 crore for the last four years of 11th FYP under RKVY. It misses to include year 2007-08 in the proposed budget. Further, the SAP gives year-wise proposed budget for all the projects for years 2008-09 and 2009-10 only. The information on

approved projects is available for four years (2007-08 to 2010-11). The total amount approved under RKVY during this period (2007-08 to 2009-10) amounts to Rs 935.36 crore years. Though it is inappropriate to exactly match the total proposed budget (for period 2008-09 to 2011-12) and the total approved budget (for period 2007-08 to 2010-11) due to different first and the last years in the two time-periods, yet the gap of over 60 per cent between the proposed and the approved funds may be considered to be large enough. However, the information on both proposed and approved funds, is available for years 2008-09 and 2009-10, and hence we can match them for these two years. The proposed funds for years 2008-09 and 2009-10 are Rs 772.65 crore and Rs 632.68 crore, respectively; the approved funds for the same years (2008-09 and 2009-10) are Rs 300.63 crore and Rs 280.51 crore respectively. Thus, there are gaps of Rs 472.02 crore (61.1 per cent) and Rs 352.17 crore (55.7 per cent) between the proposed and the approved funds for years 2008-09 and 2009-10, respectively. The extent of gap for these years is significant enough to seriously affect the targets, expected outputs/outcomes/growth impact.

15. Are the projects/programmes large enough, instead of being small and prolific pilot type schemes, to make a visible (impact) in the sectors?

A number of projects/programmes are large enough to make a visible (impact) in the sectors. For example, projects *Food Crop Production (Use of HYV Seeds)* (Rs 104.71 crore), *Cash Crop Production (Use of HYV Seeds)* (Rs 156.18 crore), *New Taluka Seed Farm* (Rs 49.75 crore), *Issue of soil health cards* (Rs 37.17 crore), *Formation of SHGs/Farmer Club* (134.54 crore), *Agriculture Mechanization* (40.13 crore), various projects under *Land Development & Watershed Activities* (Rs 646.88 crore), *Supply of hybrid cattle* (Rs 137.87 crore), *Vermi Compost* (Rs 84.36 crore), *Assistance for cattle shed to Livestock owners of tribal area* (Rs 58.84 crore), and *Establishing Cold Chain Grid for value addition in perishables* (Rs 50.0 crore), etc.

16. Has the SAPs identified Flagship programmes (extensive to cover large part of the state and larger area)?

Though the SAP does not make a formal mention of the *Flagship programmes*, yet many of its programmes/projects are extensive enough to cover large part of the State and larger area. Projects targeting promotion of HYV seeds are one such example. The projects *Food Crop Production (Use of HYV Seeds)* (Rs 104.71 crore) and *Cash Crop Production (Use of HYV Seeds)* (Rs 156.18 crore), aim at incentivizing small & medium farmers with 50 per cent subsidy on purchase of costly HYV seeds (roughly double in cost to the non-hybrid seed), while encouraging other farmers (who can afford to purchase the HYV seeds) by enabling them with requisite-informing and improving the availability of seeds. To supplement the efforts undertaken in the mentioned projects, the project *New Taluka Seed Farm* (Rs 49.75 crore) targets enhancing the production of HYV seeds by opening 194 new seed farms in the State. These projects cover large part of the State.

17. Whether sectoral and spatial allocation of funds conforms to equitable and optimal distribution of resources?

The SAP does not give a clear sectoral allocation of funds. Partly it classifies the projects by the departments and partly by the sectors. For example, it attempts to cover the projects of agriculture and horticulture sectors under *Department of Agriculture & Horticulture* (Rs 663.92

crore); land-development/reclamation and watershed development projects under *GLDC & Watershed units* (Rs 883.35 crore); agricultural infrastructure (including seed infrastructure) projects under *Gujarat State Seed Corporation* (Rs 14.02 crore), *Gujarat State Seed Certification Agency* (Rs 3.19 crore) and *Gujarat Agro Industries Corporation* (total Rs 127.84 crore); agricultural marketing projects under *Director of Agricultural & Rural Finance* (Rs 51.5 crore) and *Gujarat State Agricultural Marketing Board* (Rs 25.68 crore) (total Rs 77.18 crore); and sheep & wool sector projects under *Gujarat Sheep and Wool Development Corporation Ltd.* (Rs 0.23 crore). However the SAP clearly mentions the proposed fund allocations for *animal husbandry* (Rs 332.18 crore) and *fisheries* (Rs 37.40 crore) sectors. Further, the SAP also allocates Rs 363.32 crore for various projects proposed by the four State Agriculture Universities (SAUs) in the State. However, a critical look at the SAP gives impression that the sectoral allocation of funds conforms to equitable and optimal distribution of resources. The *land-development/reclamation and watershed development* sector that involves integrated development of watershed areas and waste lands has been given the highest share of 35.5 per cent in the total proposed budget; this is really needed as over 60 per cent area of the State is rain-fed, while soil-salinity is a major problem, particularly in 8 coastal districts of the State. *Agriculture & horticulture* sector has been given second highest share of 26.7 per cent. The high share is justified, partly because it is the largest sector in terms of providing employment/livelihood to rural population, partly to ensure food security in the State. Proposals emanating from the four SAUs have been given the third highest share of 14.6 per cent in the proposed budget allocations. This represents an attempt by the SAP to take optimum advantage of the research conducted at four reknowned SAUs of the country; the innovative projects involve modern agricultural technologies and demonstration/training activities. The *animal husbandry* sector has been allotted 13.4 per cent for its development as the sector plays a key role in supplementing the income of the farmers, while also augmenting the production of livestock products for consumption. *Agriculture infrastructure* and *agriculture marketing* sectors are given allocation shares of 5.1 per cent and 3.1 per cent, respectively as modern agriculture infrastructure, particularly for perishables, such as *cold chain grid for value addition* and *irridation plant*, as well as the agricultural marketing infrastructure, are necessary conduits for rapid agricultural growth in modern times. However, *fisheries* sector has been given a relatively low share of 1.5 though the State has an opportunity to harness the fishing-potential existing in its long coastline.

The SAP misses to give spatial allocation of funds at the aggregate level, though it provides the same at the individual project level for a majority of projects. Summing up the given district-wise proposed allocations for each district (for the projects for which district-wise breakup of the proposed funds is given), we arrive at total proposed allocations at district-level; these projects constitute total budget of Rs 1688.77 crore vis-à-vis given overall SAP budget of Rs 2485.42 crore (roughly 68 per cent of the SAP). We take the summed-up proposed allocations (for each district from the individual projects) as a proxy to the spatial allocation of funds at the aggregate level, to get a clue about spatial allocation of overall SAP budget. *Further, it is to be noted that for GLDC land development projects (Rs 236.47 crore or 14 per cent of the summed-up allocated funds), allocations for each project are given for a group of districts instead of individual district; hence assuming equal distribution of allocations among districts of the respective groups, we divided the funds equally among districts in the group for these projects.* Considering the available district-wise proposed allocations, constituting 68 per cent of the SAP budget, we find that there is moderately strong positive correlation (**+ 0.51**) between district-wise proposed allocations and the respective district populations, for the State comprising of 26 districts. This indicates that spatial allocation of funds conforms to equitable and optimal distribution of resources.

18. Are there any innovative projects? If so, how do they contribute to fulfill the special needs outside ongoing programs?

Though the SAP does not use the term *innovative* projects, yet a number of proposed projects are of innovative nature. These innovative projects are expected to supplement the ongoing programs in meeting the goals of improving agricultural productivity and meeting overall social welfare. Some examples include, project *Small Horticulture Nurseries* (Rs 8.42 crore) shall make available good quality saplings/seeds for horticulture crops in every *taluka*, giving boost to the horticulture sector; projects *Demonstration of Seed treatment by manually operated Seed Dressing Drum among the farmers of Gujarat State* (Rs 4.01 crore) and *Agriculture museum at Farmers Training Centre* (Rs 5.96 crore) shall be useful in transferring agricultural knowledge through the extension/training activities; project *Third Party Monitoring & Evaluation* (Rs 12.0 crore) shall enable monitoring and evaluation of programmes by third party monitoring agency and shall be useful in taking remedial measures if problems are faced during implementation of programmes/impact of programmes; and project *Vermi Compost* (Rs 84.36 crore) shall enhance availability of *Vermi Compost* and help promote organic farming.

19. What is the basis of planning certain projects for the State as a whole and how do they get monitored?

The SAP does not formally make explicit the basis of planning certain projects for the State as a whole. However, it is evident from the given district-wise proposed allocations in the SAP that a number of projects are planned to be implemented across all or majority number of districts (for example, the projects of SAUs). Perhaps these are the projects that involve priorities of the States, such as increasing food production by promoting use of HYV seeds, improving soil health through use of organic farming and encouraging self-employment among small & marginal farmers through supply of crossbred cattle at subsidized price. It is not explicit that these projects are monitored. But, the SAP proposes a project *Third Party Monitoring & Evaluation* (Rs 12.0 crore) that aims to monitor and evaluate the programmes by a *third party monitoring agency*; it expects the project to be useful in taking remedial measures if problems are faced during implementation of programmes/impact of programmes.

20. What is the basis of sectoral fund allocation? Is it based on expected marginal contributions? Any viability analysis is made?

The SAP is not explicit on the basis of sectoral fund allocation. However, we expect the role of the activities related to the preparation of the SAP such as bottom-up participatory approach involving various stakeholders that helped in understanding a number of problems/issues pertaining to agriculture and allied sectors and the SWOT analysis as the basis of sectoral fund allocation. It is not explicit whether sectoral fund allocation is based on expected marginal contributions. Also, no viability analysis is explicit in the SAP.

21. Whether the allocations across years were right? What was the basis for yearly allocations?

The SAP gives allocations across years at both sectorial-aggregate level (overall budget allocation) and sector level for years 2008-09 and 2009-10 only, i.e. 2nd and 3rd year of the FYP (2007-08 to 2011-12). The overall budget allocation for years 2008-09 and 2009-10 are Rs 772.65 crore and Rs 632.68 crore, respectively. The given information, though limited as it pertains to only two years out of 5 years of the Plan, indicates improper allocation across years, as allocation amount declines in the 3rd year vis-à-vis 2nd year of the Plan, defying the prudent norms of allocation

across years. Ideally, the allocation share should be minimum in the first year, being the planning stage for the project/s involving comparatively less investment capacity; the allocation share should increase in the intermediate years as subsequent years demand higher investments for the execution of the planning; and allocation share should decline in the last year because having invested sufficiently in the in-between years, the fund requirements again become low in the last year of the plan-period. Further, a cursory look at the allocations across all the four years (for which budget has been proposed in the Plan) that are available for some major projects in the SAP, indicate equal allocation of amounts across years which is again not real.

22. Is the SAP in line/ tune with overall agricultural strategy and goals of the country/ state?

The SAP seems to be in line/ tune with overall agricultural strategy and goals of the country/ state. The SAP focuses on reducing yield gaps, soil health improvement, development of waste/degraded land and watershed activities, pest management, agri business clinics & agri business centres, collection centres/strengthening of marketing activities/SHGs, micro-irrigation system & horticulture nurseries, development of pasture land/production of fodder, supply of crossbred cattle to SHGs and Vermi compost/organic certification. These measures are aimed at fulfilling the State's objectives of raising output of various agriculture & allied sectors and augmenting the income of farmers. These are expected to contribute towards country's aim of achieving 4 per cent growth rate during 11th FYP.

23. Whether mechanisms for planning, baseline information collection, monitoring, documentation and regularly reporting progress are clearly spelt out?

Though the methodology for the preparation of the SAP illustrates about involving planning during the preparation of the SAP, yet the SAP is not explicit on mechanisms for planning, baseline information collection, monitoring, documentation and regularly reporting progress. However, the SAP proposes a project *Third Party Monitoring & Evaluation* (Rs 12.0 crore) that aims to monitor and evaluate the programmes by a *third party monitoring agency*; it expects the project to be useful in taking remedial measures if problems are faced during implementation of programmes/impact of programmes.

Directions for 12th FYP

1. Whether the planning, monitoring and evaluation mechanisms exist, functional and made use of to fulfill the expectation and bridge the gaps? If not, what is the plan for strengthening PME mechanisms and making them functional during the remaining years of 11th FYP and 12th FYP when it gets launched? Whether the baseline information is maintained for comparison of performance of the project later?

It is not explicit in the SAP that whether the planning, monitoring and evaluation mechanisms exist, functional and made use of to fulfill the expectation and bridge the gaps. However, the SAP proposes a project *Third Party Monitoring & Evaluation* (Rs 12.0 crore) that aims to monitor and evaluate the programmes by a *third party monitoring agency*; it expects the project to be useful in taking remedial measures if problems are faced during implementation of programmes/impact of programmes. Further, the SAP is not explicit that whether the baseline information is maintained for comparison of performance of the project later.

2. Whether the mid-term evaluation by the external agency is done for change of the targets and inter-sectoral resource adjustments?

Though it is not explicit in the SAP that whether the mid-term evaluation by the external agency is done for change of the targets and inter-sectoral resource adjustments, yet a proposed project *Third Party Monitoring & Evaluation* (Rs 12.0 crore) aims to monitor and evaluate the programmes by a *third party monitoring agency*; the SAP expects it to be useful in taking remedial measures if problems are faced during implementation of programmes/impact of programmes. It is not mentioned.

3. Is social audit done to facilitate publicity on status of the implementation and maintenance of transparency?

It is not mentioned.

4. What are the major lessons from RKVY implementation in the State for the 12th FYP?

(i) The SAP should give information on all the projects by sectors and years with clear cut objectives, targets, output, outcome, funding (RKVY, other sources) for each project. The SAP should provide funding details under various CSS and State-level schemes (including RKVY). If not given, analyzing the extent of convergence of existing schemes with the RKVY will be difficult. Convergent approach within the sector and outside the sector should be attempted, particularly with MGNREGS to avoid duplication in respect of soil and water harvesting and conservation. MGNREGS resources can be tapped for this. Instead the SAP should come out with more interventions to concentrate on cropping and production systems including horticulture, livestock and fisheries in areas that have been developed under watershed and NRM

(ii) The main experiences of implementing CSS/State schemes should be summarized and stated whether/how they are made use of to prepare SAP for replication, expansion etc.

(iii) Prioritization of interventions needs to be attempted using standard objective methods.

(iv) The mismatch between budget proposal and allocation sanctioned should be minimum - it can be bridged quite a bit if convergence is attempted as indicated in 4.(i) above.

(v) The project proposals should emanate from Districts preferably Zilla Parishads on the basis of C-DAPs.

(vi) There should be rigorous filtering of proposals by an expert Committee earlier and in SLSC meetings later.

(vii) There should be a dedicated PM&E mechanism at the State level for facilitating project screening, database management, monitoring, evaluation and reporting of RKVY projects.

(viii) The SAP should be more explicit on its attempts on convergence in the Plan.

(ix) The SAP should provide yield-gap & return estimates, both at State and district-level, for major crops and other enterprises.

(x) The SAP should mention while enumerating the methodology the method used (Method 1 or 2) in its preparation.

Overall conclusion

The SAP is well attempted. It states physical targets both at State and at district levels for major projects proposed in the SAP, while also attempting to mention the State-level outcomes of these projects, encompassing various agriculture & allied sectors. Further, it also attempts to give year-wise and district-wise break-up of the proposed budget allocations, for major projects. It also attempts a SWOT analysis for the State. Though limited, the SAP does provide instances that indicate attempts towards

convergence as well as incorporating the experiences and lessons learnt from ongoing programmes for replication/ expansion/ modification in uncovered areas. The SAP also states yield-gaps for major crops, formulates projects that address vulnerable areas (land development/integrated watershed management projects for the tribal areas) and problem areas (soil-salinity in coastal areas), proposes large projects (to make a visible impact in the sectors), and makes sectoral and spatial allocation of funds that conforms to equitable and optimal distribution of resources. However, the SAP needs improvement in some areas. It should state programmes/projects/activities by sectors and years with clear cut objectives, targets, output, outcome, funding (RKVY, other sources) for each project; mention in detail the attempts towards convergence- inter and intra department/programmes; acknowledge about incorporating the experiences and lessons learnt from ongoing programmes for replication/ expansion/ modification in uncovered areas; present a systematic estimation of the yield gaps and returns in different crops/livestock/fisheries; and make evident systematic prioritization of interventions and strategies, in the SAP. The SAP should also make provision for a dedicated PM&E mechanism at the State level for facilitating project screening, database management, monitoring, evaluation and reporting of RKVY projects. These points require priority attention during 12th FYP.