

NIRD RKVY Monitoring Unit Analytical Report on Rajasthan SAP

1. Name of the State

Rajasthan

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 State has decided to achieve a target of 4.1 per cent growth for the agriculture sector as a whole during 11th Five Year Plan (FYP), using RKVY assistance. However, the SAP misses to state targets for the sub sectors under the agriculture sector. But, the SAP mentions the intervention activities/projects/programmes along with their funding requirement as proposed by the respective C-DAPs for each district; here again it misses to mention the *physical* targets. The SAP also lists *new/innovative projects* along with their project cost targets (but no *physical* targets), covering various sub sectors. Further, the SAP mentions projects under *new initiatives of the State government for Agriculture sector during 11th Plan*, covering various sub sectors; it states their costs but does not give the *physical* targets. However, as an isolated case, the SAP mentions both *physical* and *financial* targets under a project *Integrated Project for Optimizing Use of Water in Agriculture (IPOWA)* for year 2009-10 proposed under the RKVY programme, while it discusses the state of *groundwater* under *Water Resource Management* in the State (*page 39 of the SAP*). Under the mentioned project, the SAP targets to construct 1000 number of *Diggies/Plastic lined diggies* (during 2009-10) with a subsidy of 50 per cent of the cost subject to a maximum of Rs 1.50 lakh per diggi (per farmer) (total financial target Rs 15.0 crore). Under the same project, the SAP targets to construct 1200 number of *Water storage tanks (pucca)* with a subsidy of 50 per cent of the cost subject to a maximum of Rs 35,000 per tank (total financial target Rs 4.20 crore); and 2000 number of *Farm ponds* with a subsidy of 50 per cent of the cost subject to a maximum of Rs 30,000 per *pond* (per farmer) (total financial target Rs 6.0 crore).

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?

Though the SAP is not formally explicit on the method (Method 1 or Method 2) used for its preparation, yet it gives an impression of following a combination of the two methods. The SAP mentions of adopting bottom-up approach in a broad and overwhelming manner during its formulation, indicating the use of Method 1 (i.e. *the State Nodal Agency/Agriculture Department takes 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*). However, the facts mentioned in the *Acknowledgement* of the SAP that the C-DAPs of all 32 districts in the State are prepared under supervision of the Department of Agriculture, Government of Rajasthan, and that the same common agency (*Institute of Development Studies, Jaipur*) has consolidated the 32 C-DAPs, indicate the use of Method 2 (i.e. *the State Nodal Agency/Agriculture Department conveys to the districts in the first instance, the State's priorities, targets and resources that ought to be reflected in the respective district plans*). **The SAP states that the Department of Agriculture has prepared the 32 C-DAPs as per the guidelines of RKVY.** Further, the SAP attempts to explain the approach, objectives, need assessment and the methodology of Plan formulation employed for the

formulation of C-DAP through pictorial *charts as provided in the Planning Commission guidelines on the topic*. The *charts depict strategy of participatory planning involving various stakeholders and identification of developmental needs at grass-root level; identification of needs in farm sector, animal husbandry and other allied activities; approach towards agricultural labourers under various land-holdings categories & belonging to arid and rain-fed zones in case of farm-sector, and that towards general labour/ rearers/ traders/input suppliers under livestock /allied activities in case of non-farm sector; and long term-objectives under supply and demand sides of agriculture*. Though the SAP states that it is formulated by compiling the C-DAPs, yet it is not explicit on the integration (methodology) of C-DAPs. However, the SAP states that the SWOTs (mentioned in the SAP) are arrived at by consolidating the SWOTs from C-DAPS of 32 districts in the State. Based on the analysis of the SWOTs, the SAP recommends interventions for the *agriculture and the allied sectors*. Further, the SAP mentions the *growth-drivers* for the agricultural & allied sectors identified in the C-DAPs, while giving them scores in terms of number of districts reporting the mentioned growth-driver. But, the SAP is not explicit on prioritizing major interventions to prepare the SAP.

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 systematic SWOT analysis involving *agriculture & the allied sectors* across 32 districts of the State, covering agro-climatic conditions, natural resources, infrastructure, institutions, technologies, manpower etc. The SAP classifies each major head under SWOTs into its *components* and lists the names (and number) of the districts that are identified to have each of the mentioned *component* of SWOTs; this is understandable as the State involves a large geographical area that covers diverse agro-climate regions. The major strengths include, accessibility to agriculture university and other institutions – awareness (*10 districts*), road/train connectivity and communication (*8 districts*), adequate irrigation facility (*19 districts*), rainfall (*10 districts*), availability of planting materials (*1 district*), good soil fertility for different crops & better crop intensity (*14 districts*), Kisan Card Availability and Institutional Credit (*5 districts*), cheap labour (*5 districts*), cash crop prominence (*7 districts*), organic crop (*3 districts*), adequate market for milk and milk products and remunerative price (*12 districts*), adequate infrastructure (*8 districts*), fodder availability and pastoral land (*11 districts*), fish production (*3 districts*) and forest produce (*1 district*). The weaknesses include, absence of technical institutions and extension service (lack of awareness on crop management practices) (*18 districts*), inadequate road/train connectivity and communication (*3 districts*), lack of adequate irrigation facility/water shortage from tank, rainfall (*14 districts*), non-availability of seeds and planting materials and other inputs (*7 districts*), poor soil quality and low crop intensity (*all 32 districts*), non availability of labour (*3 districts*) and no storage and processing facilities & lack of marketing network, low price (*9 districts*), absence of high breed variety animals (*all 32 districts*), poor infrastructure facilities like inadequate storage facility and processing units (*4 districts*) and lack of fodder, grazing land, high cost of medicine, lack of other facilities for rearing sheep (*11 districts*). The opportunities include, better management through coordination of different agents (NGOs, SHGs and government schemes) (*8 districts*), farm income augmentation through productivity enhancement (mixed crop cultivation and crop diversification) (*19 districts*), innovative technology (*26 districts*), area expansion under fruits, vegetable cultivation, horticulture crops and other exportable item from organic farms (*14 districts*), good

road connectivity (3 districts), upcoming markets and processing units (10 districts), growing and up-coming markets for different varieties of milk/milk powder (20 districts) and upcoming infrastructure facilities (5 districts). The threats include, soil erosion due to wind, wild animals and fire (14 districts), droughts & canal seepage (water level depletion) (25 districts), high incidence of pest attack (14 districts), non-availability of labour (due to migration) (7 districts), non-remunerative price (24 districts), prevalence of unproductive animals and depletion of grazing land (10 districts) and lack of fodder, grazing land, high cost of medicine, lack of other facilities for rearing sheep (17 districts).

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 is not explicit on attempting convergence of inter and intra department/programmes in the State. Also, it is not explicit in the SAP that whether all potential options for convergence have been identified and explored. However, the SAP proposes funds for various agriculture & allied sectors under *State Plan, Special Projects under Agriculture Department* etc. besides the funding-proposals under RKVY emerging from the C-DAPs. For example, various components of total plan fund allocation (Rs 36,925.22 crore) under *agriculture* sub-sector include *district plan under RKVY* (Rs 27,896.56 crore), *State 11th Five-Year Plan* (Rs 490.0 crore), *Special Projects under Agriculture Department* (Rs 22.25 crore), *Agriculture Department Initiated Schemes* (Rs 8480.04 crore) and *New Scheme from Agriculture Department under RKVY* (Rs 36.37 crore). Similarly, total plan allocation of Rs 2,195.24 crore under *Agro-processing* (as part of *Other Programmes under RKVY*) involves contributions from *district plan under RKVY* (Rs 1,980.52 crore), *State 11th Five-Year Plan* (Rs 148.85 crore), *Special Projects under Agriculture Department* (Rs 13.73 crore) and *New Scheme from Agriculture Department under RKVY* (Rs 67.47 crore).

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?

The SAP is not explicit on studying the experience of on-going CSS and state schemes and incorporating the lessons learnt in SAP/C-DAPs for replication/ expansion/ modification in uncovered areas. However, the SAP lists the ongoing projects in the State (page 50).

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

The SAP has attempted to estimate the yield gaps in different crop groups such as cereals, pulses, oilseeds, fibres, spices and fruits-vegetables, covering all the districts; however, it misses to do the same for crops at individual-level. Further, similar exercise is not evident in the SAP for *livestock* and *fisheries* sectors. The SAP lists the yields of all the districts for year 2006-07 with respect to the above mentioned crop-groups (*cereals, pulses, oilseeds, fibres, spices and fruits-vegetables*) and ranks them (the districts) in order of their yields. It ranks the 32 districts into two groups: districts with yields higher than the State average are ranked separately from those having yields lower than the State average. However, the standard method of yield gap analysis that estimates yield gap between the progressive farmer yield (*or scientifically determined yield involving optimum conditions and resource/input use*) and the average farmer yield, is not evident in the SAP.

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

The SAP provides *Constraint Analysis* for major agriculture crops (*mustard, wheat, barley, gram, bajra and guar*), horticulture crops (*cauliflower, kharif onion, bhindi, ber and anola*) and the animal husbandry sector (*artificial insemination, fodder, minerals & vitamins, inter-calving period, health care and general management*) in which it mentions the critical technological gaps contributing to the yield gaps. Further, the SAP also mentions in general (not crop-specific) major agronomic gaps that affect production and productivity of crops such as, poor soil fertility, irrigation-constraint and low use of inputs like fertilizers and pesticides. Though the SAP is not formally explicit on how the technological and agronomic gaps are identified to contribute to yield gaps, yet it seems that the inputs received (including that on SWOTs) through participatory bottom-up approach involving various stakeholders (during formulation of the C-DAPs), have significantly contributed in identification of the 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?

Though the SAP is not formally explicit on how the identified constraints are adjudged responsible for low crop productivity in general and specific crops in particular, yet it seems that the inputs received (including that on SWOTs) through participatory bottom-up approach involving various stakeholders (during formulation of the C-DAPs), have played a key role in adjudging the identified constraints responsible for low crop productivity. Whether it is an opinion or stated on the empirical basis is not explicit in the SAP.

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

Though the SAP is not formally explicit on how the interventions are identified to bridge the gaps in productivity levels, yet it is implicit from the SAP that both the analysis of SWOTs and the inputs received through participatory bottom-up approach involving various stakeholders (during formulation of the C-DAPs), have played a key role in identifying the interventions to bridge the gaps in productivity level.

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?

Though the SAP provides strategies to bridge the yield gaps in crop/livestock/fisheries and maximize returns to farmers, yet it is not explicit on prioritization of these strategies. Further, though the SAP provides crop-specific strategies for *agricultural crops (mustard, wheat, barley, gram, bajra and guar)* and *horticultural crops (cauliflower, kharif onion, bhindi, ber and anola)* as well as specific strategies for particular gaps under *animal husbandry sector (related to artificial insemination, fodder, minerals & vitamins, inter-calving period, health care and general management)*, yet it is not explicit on providing empirical basis for appropriate strategies. However, it is implicit that the inputs received (including that on SWOTs) through consultative participatory bottom-up approach involving various stakeholders (during formulation of the C-DAPs), have a key role in obtaining/deciding the appropriate strategies.

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 has attempted to translate the prioritized strategies into programmes/projects/activities by sectors and years along with funding for each project. However, it misses to state objectives, targets (in physical terms), output and outcome, and specify the amount of funding by source (RKVY, other sources) for each project. It is not explicit from the SAP that whether the viability of each project to achieve the expected output is considered.

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

The SAP has attempted to address problem areas of the State such as those having scanty rainfall and poor status of irrigation like *Barmer* and *Jodhpur* districts belonging to the *Arid Western Plains* by formulating water harvesting projects. For example, *Water harvesting for infrastructure for life saving irrigation @ 100,000 each for 100,000 litre capacity tank* (Rs 18.90 crore) for *Barmer* district; and *Water reserve tank of irrigation pucca hauj nirman* (Rs 8.85 crore) and *Water harvesting infrastructure with plastic line for life saving irrigation* (Rs 101.70 crore) for *Jodhpur* district. Further, the SAP proposes projects like *Combating iron malnutrition through crop enrichment with iron fertilizer and product development in western Rajasthan* (Rs 1.58 crore), *Enhancing water productivity in agriculture in Western Rajasthan* (Rs 0.92 crore) and *Optimization of green forage production and ensuring its availability through out the year under limited availability of irrigation water in NW Rajasthan* (Rs 0.90 crore).

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 Rs 40,530.0 crore under RKVY for the 11th FYP (*based on C-DAPs of all 32 districts*). However, it states the proposed allocations on yearly-basis only for the last two years (2010-11 and 2011-12) of the 11th FYP; the SAP proposes Rs 11,962.25 crore and Rs 6,865.16 crore under RKVY for years 2010-11 and 2011-12, respectively. The approved allocations (as per the *consolidated statement* from RKVY website) for years 2007-08, 2008-09, 2009-10 and 2010-11 are Rs 71.68 crore, Rs 233.75 crore, Rs 186.12 crore and Rs 572.47 crore, respectively. The cumulative approved allocation for the first-four years (2007-08 to 2010-11) under 11th FYP, for which information on approved funds is available, is Rs 1,064.02 crore. There is a gap of Rs 39,465.98 crore (97.4 per cent of the proposed amount) between the given total proposed allocation (Rs 40,530.0 crore) for 11th FYP and the total approved allocation (1,064.02 crore - *involving first four-years under 11th FYP i.e. 2007-08 to 2010-11*). Since information for both proposed and approved allocations together is available for year 2010-11 only, it limits the exercise of determining mismatch between proposed and approved funds on yearly-basis to one year only. The SAP proposes Rs 11,962.25 crore for year 2010-11 while approved amount for the same year is Rs 572.47 crore; there is a gap of Rs 11,389.78 crore (95.21 per cent) between the proposed and the approved funds for year 2010-11. The huge mismatch between the proposed and approved amounts is expected to severely affect targets, expected outputs/outcomes/growth for projects proposed.

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 proposed under RKVY, that emerge from C-DAP level include large projects/activities. For example, *agriculture development (Rs 47.40 crore)*, *fencing of farm @ Rs 10,000 per running kilometer (Rs 28.50 crore)*, *seed production program (Rs 18.96 crore)* and *water reserve tanks for sprinkler @ Rs 50,000 (Rs 21.0 crore)* for Barmer district; *agriculture fencing (Rs 31.50 crore)* and *small irrigation planning (Rs 18.09 crore)* for Pali district; *Water harvesting infrastructure with plastic line for life saving irrigation (Rs 101.70 crore)* for Jodhpur district; and *cattle feed plant (Rs 40.07 crore)* for Hanumangarh district.

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

The State Plan does not explicitly mention Flagship programmes. However, some projects mentioned under *New Initiatives of the State Government for Agricultural Sector during 11th Plan* are extensive to cover large part of the State. For example, project *Green Fodder Cultivation (Rs 75.0 crore)* covers *arid western plain, irrigated north western plain and hyper arid partial irrigated zone*; and project *Support for Extension Services (Rs 17.35 crore)* includes *all agro-climatic zones* in the State.

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

The SAP proposes a total of Rs 40,536.13 crore under *District Plan under RKVY* (however, the *Demand for Funds under RKVY and other schemes for 11th Plan* is given at Rs 40,530 crore), Rs 917.30 under *State 11th FIVE Year Plan*, Rs 293.66 crore under *Special Projects under Agriculture Department*, Rs 8480.04 crore under *Agriculture Department/Initiated Schemes* and Rs 103.84 crore under *New Schemes from Agriculture Department under RKVY*; adding these we get the total Plan fund allocation for agriculture & allied sectors under different schemes during the 11th Plan period equal to Rs 50,324.84 crore; **we analyse the sectoral allocation of funds with reference to the total Plan fund allocation for agriculture & allied sectors worth Rs 50,324.84 crore.** The SAP proposes a huge allocation of Rs 36,925.22 crore towards *Agriculture production* constituting 73.4 per cent of the total proposed funds during the FYP. The allocation share is quite appropriate as the *agriculture* sector in the State is passing through a testing-time, evident from a very low value of 0.30 per cent of *annual trend rate of growth of Net State Domestic Product (NSDP)* from agriculture during 1995-96 to 2004-05 against the national average of 2 per cent per annum for the same period. Further, the proportion of farm dependent population comprising cultivators and agricultural labourers is 66 per cent in the State against the national average of 58 per cent, highlighting importance of the *agriculture* sector in providing livelihood to the people; these, along with the poor fertility of soil and vastly rainfed nature of agriculture in the State, mandate need for special efforts to rejuvenate the *agriculture* sector. The SAP proposes the second highest share of 9.5 per cent (Rs 4,761.49 crore) for the *forestry* sector; the SAP intends to tap the potential of *forestry* (including social forestry) in terms of generation of revenue on items like *timber, firewood & charcoal, bamboo* etc. It indicates the need to incorporate the social forestry aspect in the agriculture of the regional economy, highlighting the lack of awareness in farming community of the potential source of income from social forestry. Thus, the allocation share may be considered as appropriate. The SAP proposes 4.4 per cent (Rs 2,195.24 crore) for *agro-processing* sector (as part of *other programs under RKVY*). The *agro-processing* sector forms a substantial part of industries in the State; 10,000 agro-processing units are in small and tiny sector while 74 have emerged in medium and large scale sector. The *agro-processing* sector offers scope for development of several industries such as *solvent extraction, oleoresins, kinnow/orange juice,*

malt extracts and floriculture; mushrooms and tomato processing; other processing industries based on mango, ber, pomegranate and vegetables like onion, potato and garlic; herbal & medicinal plants; meat-processing, poultry & poultry products; and non-edible oil processing. The sector entails great potential to generate employment and income for the people in the State; hence, the allocation-share seems to be appropriate. The SAP proposes 3.3 per cent (Rs 1,679.90 crore) for the *irrigation* sector. The allocation is appropriate as the State is largely rain-fed with 60 per cent of the gross sown area falling under *arid or semi-arid* zones; and the State is also deficit in ground-water availability as it has 11 per cent of country's *total land resources* and 1 per cent of country's *total water resources*. This necessitates optimum utilization of available water through water storage structures like construction of farm ponds, water storage tanks, construction of duggies and pipeline. The SAP allocates 2.7 per cent (Rs 1,381.16 crore) for *soil-conservation*. The allocation is appropriate as the soil-health in the State is generally poor; in particular, the least fertile *desert soil* is found prominently in 9 districts, adversely affecting the crop-productivity. This highlights the importance of soil-conservation and improving soil-health in the State. The SAP proposes only 1.8 per cent (Rs 891.29 crore) for the *animal husbandry* sector. The allocation share seems to fall short of the actual requirement as the *animal husbandry* sector in the State acts as a main source of income for the small & marginal farmers during often-occurring drought years. Further, the sector contributes 12.7 per cent to the NSDP of the State in years 2007-08, highlighting its importance in the State economy. The SAP allocates 1.8 per cent (Rs 887.47 crore) for *extension & training*. The allocation is appropriate as *extension & training* are necessary for transferring the modern agricultural technologies to farmers for improving the yields. The SAP allocates 1.3 per cent (Rs 678.06 crore) for the *horticulture* sector. The allocation seems to be somewhat less as *horticulture* is an up-coming sector in the State with latent and immense potential; it may be perceived as a potential source of alternative employment opportunities, particularly for ruminant farming community. Flowers and other horticultural crops also present income-generating export potential. The SAP allocates 1.0 per cent (Rs 518.11 crore) for *cooperative* sector. The allocation is appropriate as the sector plays a useful role in the development of agriculture & allied sectors by fulfilling the necessary resource requirements for farmers such as credit and farm-inputs. The SAP proposes 0.7 per cent (Rs 372.21 crore) towards *public-private partnership*. This is a good initiative and is expected to contribute in efficient implementation of the projects. The SAP allocates 0.1 per cent (Rs 34.69 crore) for *fisheries* sector. The allocation seems to be low as the State has a huge scope for tapping its 3.30 lakh hectares of inland fresh water resources which remain largely untapped. Overall, the sectoral allocation of funds may be considered as conforming to equitable and optimal distribution of resources. However, the spatial allocation of funds does not conform to equitable and optimal distribution of resources as is evident from negative value of the coefficient of correlation (-0.09) calculated between population at district-level and district-wise allocation of funds. Surprisingly, *Kota* district with a population share of just 2.78 per cent receives 53.5 per cent of the total proposed allocation amounting to Rs 21,671.82 crore.

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

Yes, the SAP proposes some projects as *innovative and new projects* which are proposed under *department-wise projects sanctioned by Chief Secretary during 2010 looking to the drought situation under Rashtriya Krishi Vikas Yojna*. These projects include, *Free fodder mini-kit distribution (10 lakh during Rabi 2009-10 & 4.00 lakh during Zaid 2009-2010)* (Rs 19.0 crore), *Construction of 100 community farm ponds on farmers field* (Rs 10.0 crore), *Construction of*

additional diggies (Rs 7.50 crore) etc. These projects are expected to complement the irrigation-initiatives of the FYP and thereby strengthen the status of irrigation and combat the threat of drought in the State. Further, the projects/activities proposed at C-DAP level also include a number of innovative projects mentioned under 'others'. Almost every district proposes various projects/activities under 'others'. The examples include, *certification of organic produce, monitoring and evaluation, maintenance of dams, development of technical museum* etc. These projects are expected to complement in smooth implementation of the projects proposed under the FYP.

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

Though the basis of planning certain projects for the State as a whole is not explicit in the SAP, yet we expect that agricultural priorities for the State as perceived by the *State Agriculture Department* (SAD) based on SWOT-analysis, information obtained during C-DAP formulation through participatory bottom-up approach, and their (SAD) own experience and judgment might have formed basis of planning these projects.

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

The basis of sectoral fund allocation is not explicit in the SAP. It is not explicit whether it is based on expected marginal contributions. Further, any viability analysis is not explicit. However, it is implicit from the SAP that formulation of the Plan/proposed projects is based on the SWOT-analysis and participatory bottom-up approach followed during preparation of the C-DAPs.

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

The SAP misses to give allocations across years for the *total Plan fund allocation* (worth Rs 50,324.84 crore) during the 11th FYP. Hence, we are unable to comment on it. However, for scheme *new initiatives of the State government for agricultural sector during 11th Plan* (worth Rs 848.0 crore), the SAP gives allocations for three years (2010-11, 2011-12 and 2012-13); *it is too less an amount (Rs 848.0 crore) to comment upon, being less than 2 per cent of the total Plan fund allocation*. Further, the SAP also gives allocations across years (*for two years: 2010-11 and 2011-12*) for projects proposed at C-DAP level (worth Rs 40,530.0 crore), as *Demand for Funds under RKVY and other schemes in agriculture and allied activities for 11th Plan*; it involves allocations worth Rs 11,962.25 crore (29.5 per cent) and Rs 6,865.16 crore (16.9 per cent) for the last two years of the 11th FYP, respectively; though the allocations across years are not given for all the years of the 11th FYP, limiting us from commenting on its appropriateness, yet allocations for the last two years (29.5 per cent and 16.9 per cent of the total funds) seem to be in line with the prudent norm for allocation of funds across years. Under prudent norm for allocations across years, the allocations follow a normal distribution. 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, the basis for yearly allocation is not explicit in the SAP.

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. It gives special emphasis on rejuvenation of the *agriculture* sector with a proposed allocation share of 73.4 per cent. This is expected to boost the production and yield of crops, ensuring increase in both income and employment of the people who are predominantly dependent on this sector for their livelihood, besides contributing to an enhanced food security, both at State and at country-level; this is particularly relevant when area and production of food-grains has recorded a fall during the 10th FYP. 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?

Mechanisms for planning, baseline information collection, monitoring, documentation and regularly reporting progress are not explicit in the SAP. However, the C-DAPs of some districts propose *monitoring & evaluation* as activities under category *others*, such as *Bikaner* district (Rs 2.0 crore) and *Churu* district (Rs 2.47 crore).

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?

The SAP is not explicit on whether the planning, monitoring and evaluation mechanisms exist, functional and made use of to fulfill the expectation and bridge the gaps. Further, the SAP is not explicit on the plan for strengthening PME mechanisms and making them functional during the remaining years of 11th FYP and 12th FYP, when it gets launched. Also, it is not explicit on whether the baseline information is maintained for comparison of performance of the project later. However, the C-DAPs of some districts propose *monitoring & evaluation* as activities under category *others*, such as *Bikaner* district (Rs 2.0 crore) and *Churu* district (Rs 2.47 crore)..

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

The SAP is not explicit on the mid-term evaluation by an external agency.

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 provide funding details under various CSS and State-level schemes (including RKVY) along with their respective share of funding, for all the projects. 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) Further, the SAP should state programmes/projects/activities by sectors and years with clear cut objectives, targets, output, outcome, funding (RKVY, other sources) for each project.

(iii) 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.

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

(v) 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.

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

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

(viii) 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.

(ix) Allocation of funds across years should follow prudent allocation norm. Further, examining allocations across years requires allocation values for all years of the FYP; hence proposed allocations should be provided for all years under the FYP.

Overall conclusion

The SAP is well attempted. It states target for the overall agriculture sector. It attempts a systematic analysis of SWOTs, involving districts. It also attempts constraint/yield-gap analysis for agricultural and horticultural crops. It puts-forth strategies and interventions for development of agricultural & allied sectors. It lists projects/activities proposed at the district-level, for all districts. However, the SAP needs to further improve upon. Firstly, it should state *physical* targets for various sub-sectors under *agriculture & allied* sectors; *it should also state programmes/projects/activities by sectors and years with clear cut objectives, targets, output, outcome, funding (RKVY, other sources) for each project.* Secondly, it should elaborate on the *methodology* used for the preparation of the SAP, including integration of C-DAPs and prioritization of interventions. Thirdly, the SAP should give examples of attempting convergence along with sources of funding (RKVY and others) for each project. Fourthly, the allocation of funds across years should follow prudential allocation norms; *proposed allocations should be provided for all the years under the FYP.* Fifthly, prioritization of strategies should be undertaken. Sixthly, spatial-allocation of funds should conform to equitable and optimal distribution of resources. Further, standard method of yield gap analysis, estimating the difference between *progressive farmer yield* and *average farmer yield*, should be used; and main experiences of implementing CSS/State schemes should be summarized. 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.