

NIRD RKVY Monitoring Unit Analytical Report on Nagaland SAP

1. Name of the State

Nagaland

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 decides RKVY assistance outlay of Rs 822.08 crore during 11th Five Year Plan (FYP) for the agriculture sector as a whole towards achieving the RKVY objective of 4 per cent annual growth rate. Also, the SAP attempts to state targets for various sub sectors using RKVY assistance during 11th FYP. It states year-wise targets for years 2008-09 to 2011-12 for various crops under *agriculture* and *horticulture* sub sectors (in terms of *area* and *production* to be added/achieved) and for various components/items under *fisheries*, *sericulture*, and *land resource development* (but it misses the *animal husbandry/veterinary* sector under the RKVY assistance outlay). Further, the SAP misses to give *Area* and *Production* figures for the base year with respect to each crop/component/item mentioned; it only states the annual targets decided to be achieved during period 2008-09 to 2011-12. For example, under RKVY programme the SAP targets to increase the *Area* under *Paddy* crop by 8,400 Hectare (ha), 8,600 ha, 9,000 ha and 10,000 ha in years 2008-09, 2009-10, 2010-11 and 2011-12, respectively; it targets to increase the *Production* of *Paddy* crop by 19,200 Metric Tonnes (MT), 25,800 MT, 27,000 MT and 30,000 MT in years 2008-09, 2009-10, 2010-11 and 2011-12, respectively using the RKVY assistance; the cumulative additions in *Area* and *Production* during the 11th FYP for the *Paddy* crop are 36,000 ha and 102,000 MT, respectively. Similarly, the SAP gives annual *Area* and *Production* targets (including their cumulative values for the entire Plan period) for a host of agricultural and horticultural crops that include, *Maize*, *Mustard*, *Wheat*, *Soybean*, *Pea*, *Potato*, *Ginger*, *Jute* and *Turmeric* (agricultural crops); and *Plum*, *Peach*, *Orange*, *Lemon*, *Banana*, *Guava*, *Mango*, *Litchi*, *Pineapple*, *Passion fruit*, *Mousambi*, *Cashewnut*, *Cabbage*, *Brinjal*, *Chilly*, *Peas*, *Bean* and *Tomato* (horticultural crops). However, the target figures for increase in *Area* and *Production* mentioned in the SAP are over ambitious as they represent **huge** increase in the cropped area. Otherwise, the units used to state the *Area* and *Production* of various crops may be incorrect either; as per the information sourced from a document by Department of Agriculture, Government of Nagaland (<http://agricoop.nic.in/Rabi09/NAGALAND.ppt>) the total cultivable area of the State is 721,924 ha while its Gross Cropped Area is 384.75 ha (year not mentioned); the same document also states the production figures for *Foodgrain* and *Oilseeds* as 515.30 MT and 72.13 MT, for year **2008-09**. Though the total cultivable area of the State is high, yet the given targets pertaining to increase in *Area* seem to be optimistic though they may be feasible. The SAP also gives annual targets (in terms of *area* and *production* to be added/achieved) for various *components* under *Sericulture* and *Land Resource Development* sectors for years 2008-09 to 2011-12 (along with their cumulative value for the 11th FYP) using the RKVY assistance outlay. For example, it targets an annual increase of 900 *Acres* in *Area* and 2,250 MT in *Production* in each of the four years 2008-09 to 2011-12 (with cumulative increase of 3,600 *Acres* in *Area* and 9,000 MT in *Production* during the 11th FYP). The other *components* under *Sericulture* sector for which the SAP gives annual *Area* and *Production* or *Number* targets for years 2008-09 to 2011-12 include *Eri pupa*, *Muga Cocoons*, *Eri silk cut cocoons*, *Eri pupa Production*, *Production Muga Cocoons*, *Strengthening of Eri seed Grainage*, *Strengthening of Muga seed Grainage*, *Establishment of Kesseru Nursery* and *Establishment of*

Som Nursery. Similarly, for the *Lemon grass* component under *Land Resource Development* sector, the SAP targets annual increase in *Area* by 3,000 ha, 4,000 ha, 2,000 ha and 1,000 ha, and annual increase in production by 67,500 MT, 90,000 MT, 45,000 MT and 22,500 MT, during years 2008-09, 2009-10, 2010-11 and 2011-12, respectively. The other *components* under the *Land Resource Development* sector for which the SAP gives similar targets (using the RKVY assistance outlay) include *Patchouli, Agar, Apiculture* and *Rubber*. The SAP also gives separately the targets decided under *State Plan* during years 2008-12 (of the 11th FYP) with respect to *Agriculture, Veterinary, Fishery* and *Land Resource Department* sectors; however, the SAP misses here also in giving the base-year information pertaining to the variables for which it is giving the targets. That the SAP is giving annual targets pertaining to increase in *Production/Area* of various items, is evident in case of *Veterinary, Fishery* and *Land Resource Department* sectors; however, giving annual targets pertaining to actual Area and *Production* levels (and not the increase) is implicit in case of the *Agriculture* sector. Under the *State Plan*, the *Agriculture* sector targets to increase the total *Area* under *Total Foodgrain* to 360.46 ha, 396.51 ha, 436.16 ha and 479.78 ha, and its *Production* is targeted to increase to 653.52 MT, 718.87 MT, 791.76 MT and 870.94 MT, during years 2008-09, 2009-10, 2010-11 and 2011-12, respectively; the SAP gives similar targets for *Cereals, Pulses, Oilseeds* and *Other crops* categories under the *Agriculture* sector. Under *State Plan*, for the *Veterinary* sector the SAP targets to increase the production of *Milk* by 90.0 MT, 115.0 MT, 115.0 MT and 129.0 MT (cumulative value 449.0 MT); production of *Meat* by 76.0 MT, 87.0 MT, 95.0 MT and 101.0 MT (cumulative value 359.0 MT); and production of *Egg* by 880.0 MT, 920.0 MT, 960.0 MT and 1,000 MT years (cumulative value 3760.0 MT), during years 2008-09, 2009-10, 2010-11 and 2011-12, respectively. For the *Fisheries* sector, the *State Plan* targets to increase *Fish Production* by 6,750 MT, 7,250 MT, 7,750 MT and 8,500 MT (cumulative value 30,250.0 MT), and *Fish Seed Production* by 55.0 Million, 60.0 Million, 65.0 Million and 70.0 Million (cumulative value 250.0 Million), during years 2008-09, 2009-10, 2010-11 and 2011-12, respectively. For the *Land Resource Development* sector, the *State Plan* targets increase in *Area* under *Medicinal & Aromatic Plant* by 80.0 ha, 80.0 ha, 80.0 ha and 40.0 ha, and increase in *Number of Apiculture* by 400.0, 400.0, 400.0 and 280.0, during years 2008-09, 2009-10, 2010-11 and 2011-12, respectively ; it targets increase in *Area* under *Rubber Plantation* by 100.0 ha each in years 2008-09 and 2009-10, respectively and *Area* under *Agro forestry* by 250.0 ha in 2008-09. Under the *State Plan*, the SAP also gives annual targets of *Production* for various components/items of *Sericulture* sector that include *Mulberry, Eri, Muga* and *Oak Tasar* cultures. Besides this under the *State Plan*, the SAP also gives *Area* and *Production* targets for 43 different horticultural crops. However, for the *sericulture* and *horticulture* sectors it is not explicit whether the given annual targets are an anticipated increase in *Production* and *Area* over base-year values or they (given targets) represent actual levels of *Production* and *Area* for the mentioned years (2008-09 to 2011-12). **Though the SAP gives targets under various sub sectors of the whole Agriculture sector, yet it in some cases lacks clarity on whether the target production/area/number is an increase over base-year value (i.e. incremental value) or it is actual (overall) value of the anticipated production/area/number for the year concerned. This is because of the fact that the SAP has missed to state the base-year values production/area/number. Further, in absence of the base-year values, we are unable to actually make a true assessment of the targets.** The SAP also gives year-wise *Physical* and *Financial* targets for each project at district-level for period 2008-09 to 2011-12.

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 **misses** to mention the methodology used for its preparation. Hence, it is not explicit that which method (Method 1 or Method 2) is used in the preparation of the SAP. Further, the SAP is not explicit on how the integration (methodology) of C-DAPs and prioritizing major interventions is done to prepare the SAP. However, the SAP states that the Plan is centred around four specific aspects namely, *Enhanced Production, Employment Generating activities, Infrastructure Creation and Support Mechanism* that constitute the *Agriculture Development Model* of the State; but the SAP does not give further details on it.

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 state the agricultural situation of the state through a SWOT analysis. The strengths include, rich indigenous traditional knowledge among ethnic groups significantly contributes in productivity-improvement of agriculture & allied sectors (in absence of modern agricultural technology); high literacy-level in the State (67.11 per cent); rich land-resources presenting immense scope for agricultural production at commercial scale specially for growing high value temperate fruits, medicinal plants etc.; immense scope for quality production in upland farming system; State being *organic* by default; and existence of vast reserves of minerals such as crude oil, natural gas, limestone etc., enabling them to be tapped for industrial development of the State. The weaknesses include, traditional means of farming with restricted yield-levels (i.e. absence of *high-yielding* modern agricultural technology-based *farming*); hill-topography contributing to difficulty in transport and communication in general while inaccessibility in most parts during rainy season in particular; grossly inadequate public-infrastructure facilities like health care, drinking water, sanitation and hygienic wayside amenities; weak agro-processing sector, lacking potential to generate any employment and economic growth; insurgent activities act as major retarding factor in the process of growth and development; and land-tenure system not conducive for business development/investment. The opportunities include, immense potential for tourism development due to factors like the panoramic view of *Himalayas*, picturesque landscape, colourful *sunrise & sunset* along and the distinct cultural heritage of the State including dance and music; rich in producing handicrafts and handloom products such as colourful *sarongs, shawls*, simple unostentatious jewelry statuettes, hand woven baskets and mats etc.; and new *Electricity Act 2003* provides opportunities for growth for service industries in distribution and revenue collection, isolated generation, rural electrification etc. subject to its adoption. The Threats include, major threat of insurgent groups to development and industrialization of the State and increase of immigrant population into the State may lead to serious socio-economic problem in future.

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. The extent of convergence is also not explicit in the SAP. Further, it is not explicit that whether all potential 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?

The SAP does not give enough evidence that suggests about 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. In general, it also misses to give reference to the on-going CSS and state schemes. *However*, a small instance given in the SAP indicates about studying the experience of on-going CSS/state schemes; the SAP mentions about the success of *Integrated Wasteland Development Project (IWDP)* in introducing cultivation of *Lemon grass, Patchouli* and *Agar* in some selected villages during last few years. The project has also involved training on *Package and Practices of Patchouli and Lemon grass cultivation* along with providing planting materials and timely technical intervention and assistance to the farmers; it also mentions the setting up of four distillery units by the department. The SAP seems to have taken lesson in these cases from the ongoing scheme/project as it proposes projects/activities related to *Training* (Rs 1.43 crore) and *Medicinal & Aromatic Plants* (Rs 27.17crore) under *Land Resources* Department as part of RKVY outlay.

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

The estimation of yield gaps and returns in different crops/livestock/fisheries is **not** evident in the SAP. Further, the SAP misses to give yield-levels pertaining to crops/livestock/fisheries; also, it does not give the actual *production* and *area* values. However, it gives year-wise *anticipated* (targeted) *area* and *production* values based on RKVY programme and the *State Plan* for different crops/livestock/fisheries for period 2008-09 to 2011-12.

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

The SAP identifies technological/agronomic gaps that contribute to yield gaps in general. For example, constraints posed by the difficult hilly-terrain in the predominantly hill-State, grossly inadequate infrastructural facilities, prevalent use of low-yielding traditional varieties of most crops, traditional mode of agriculture (instead of high-yielding modern scientific methods), irrigation-constraints despite abundant rainfall and water resources, substantial soil-erosion due to surface-runoff of most of the rain-water etc. (Agriculture and Horticulture); insufficient/lack of veterinary services, diagnostic laboratory for diseases, supply of medicines/vaccines, credit facilities, processing facilities, A.I. centres, breeding farm/feed mill, training facilities and inadequacy and high costs of feeds/fodder in the State (Livestock sector); lack of scientific development of fishery as an industry (Fisheries); and non-commercialization of sericulture activities, use of primitive/traditional technology, insufficient/weak infrastructure, lack of marketing facility, small-land holding, inadequate R&D support, extension services, training facilities, insurgency etc. (Sericulture). However, the SAP is not explicit on how the technological and agronomic gaps are identified to contribute to yield 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. The SAP is not explicit on whether it is an opinion or stated on the empirical basis as there is no reference to it in the SAP. However, the SAP has attempted a SWOT analysis.

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

The SAP is not explicit on how the interventions are identified to bridge the gaps in productivity levels. However, the SAP has attempted a SWOT analysis which may have contributed in indentifying 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 proposes strategies for the *Agriculture, Livestock, Fisheries* and *Sericulture* sectors that may contribute in bridging the yield gaps and maximizing returns to farmers. For example, *distribution of improved seeds, farm mechanization, improved implements, diversification to horticulture crops* etc. (Agriculture and Horticulture); *organizing motivational training programmes, establishment of feed mill, providing good quality semen/other veterinary services, establishment of fodder farm, establishment of satellite farm for supply of day-old chicken, hatching eggs, exotic piglets etc., providing adequate financial support from government and other financial institutions* etc. (Livestock); *identifying, disseminating & implementing appropriate technology to optimize fish production, promoting economic fish-farming among large landholders and fish rearing in the smaller ponds, encouraging commercial fish production in all water bodies of the State, promoting responsive-participatory restocking of capture fisheries and preserving indigenous fish species and their habitat* (Fisheries); and *augmentation of Eri and Muga food plant and rearing of Silkworms annually, strengthening of Eri and Muga grainage, training/awareness programmes* etc. (Sericulture). The SAP also lists a number of *strategies and thrust areas* along with the required funding to implement the activities (representing schemes/programmes/projects proposed in the SAP) given under *Agriculture, Horticulture, Veterinary & Animal Husbandry, Fishery* and *Sericulture* sectors. However, the SAP does not indicate a formal prioritization of the right strategies in the SAP. Further, either an empirical basis for the appropriate strategies or their obtaining through a consultative process with all the relevant stake holders is not explicit in the SAP.

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 stated strategies into schemes/programmes/projects by sectors with distribution of the total proposed funds (for each project) across districts; however, the SAP misses to give it by years with objectives, *physical* targets, output and outcome for each project. However, the SAP states year-wise targets and funding at district-level only 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 projects proposed in the SAP (under various sub sectors of the whole agriculture sector) aim at developing the economically backward small hill-State as a whole (*agriculturally, industrially and infrastructurally backward*) where *agriculture* (the main economic activity) is conducted in a traditional manner and is in under-developed stage, resulting in low-yields and income to farmers.

Formulation of specific projects addressing border areas/ insurgent areas/problem areas (mining, acidic soils etc), is not evident in the SAP.

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 822.08 crore under RKVY for period 2008-09 to 2011-12, comprising last four years of the 11th FYP. On yearly-basis, the SAP proposes Rs 207.25 crore, Rs 229.60 crore, Rs 208.81 crore and Rs 176.42 crore for years 2008-09, 2009-10, 2010-11 and 2011-12, respectively. The approved budgets for the State (as per the *consolidated statement* from RKVY website) for years 2007-08, 2008-09, 2009-10 and 2010-11 are Rs 9.45 crore, Rs 13.89 crore, Rs 20.38 crore, and Rs 13.24 crore, respectively, cumulating to a sum of Rs 56.96 crore. Though the total proposed outlay of Rs 822.08 crore (involving last 4 years of the 11th FYP) is not strictly comparable with the total approved budget of 56.96 crore (involving first four years of the 11th FYP), yet there is a huge gap of Rs 765.12 crore (93.1 per cent of the proposed budget) between the total *proposed* and *approved* amounts for the 11th FYP. On yearly-basis, there are gaps of Rs 193.36 crore (93.3 per cent), Rs 209.22 crore (91.1 per cent) and Rs 195.56 crore (93.7 per cent) in years 2008-09, 2009-10 and 2010-11, respectively, between the *proposed* and the *approved* budgets; since *proposed* budget and *approved* budget are not available for years 2007-08 and 2011-12, respectively, comparison between the *proposed* and *approved* amounts cannot be done for these two years. There is huge mismatch between the proposed and the approved amounts; it is expected to severely affect targets, expected outputs/outcomes/growth for programmes 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?

The projects/programmes proposed in the SAP are large enough, instead of being small and prolific pilot type schemes, to make a visible (impact) in the sectors. For example, *Integrated Development of major food crops* (Rs 63.24 crore), *Agricultural Mechanization* (Rs 15.22 crore), *Market Infrastructure Development* (Rs 20.07 crore), *Agricultural Link Road* (Rs 41.70 crore), *Land & Water Management* (Rs 16.92 crore), *Rainfed Farming System Dev.* (Rs 17.81 crore), *Integrated Development of major horticultural crops* (Rs 51.27 crore), *Community Tank* (Rs 31.0 crore), *Farm handling unit* (Rs 18.0 crore), *Horticulture Link Road* (Rs 16.0 crore), *Water Harvesting Pond* (Rs 31.23 crore), *Dry Terracing* (Rs 78.0 crore), *Livestock Production and Management* (Rs 59.63 crore), *Land reforms under development of untapped water bodies* (Rs 82.36 crore), etc.

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

Though the SAP formally does not mention the *Flagship* programmes, yet it proposes some large projects/programmes (extensive to cover large part of the State and larger area), such as *Integrated Development of major food crops* (Rs 63.24 crore), *Agricultural Mechanization* (Rs 15.22 crore), *Market Infrastructure Development* (Rs 20.07 crore), *Agricultural Link Road* (Rs 41.70 crore), *Land & Water Management* (Rs 16.92 crore), *Rainfed Farming System Dev.* (Rs 17.81 crore), *Integrated Development of major horticultural crops* (Rs 51.27 crore), *Community Tank* (Rs 31.0 crore), *Farm handling unit* (Rs 18.0 crore), *Horticulture Link Road* (Rs 16.0 crore), *Water*

Harvesting Pond (Rs 31.23 crore), *Dry Terracing* (Rs 78.0 crore), *Livestock Production and Management* (Rs 59.63 crore), *Land reforms under development of untapped water bodies* (Rs 82.36 crore), etc.

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

Since, the allocation mentioned under the *State Plan* during 11th FYP is too less at Rs 118.26 crore vis-à-vis the proposed RKVY assistance for the same period (indicating incomplete information with respect to the *State Plan*), we limit the analysis of the *sectoral allocation of funds* to the RKVY assistance outlay only. Out of the total proposed allocation of Rs 822.08 crore for the 11th FYP under RKVY, the SAP proposes Rs 227.87 crore (27.7 per cent) for the *Agriculture* sector. The allocation share is quite appropriate as *Agriculture* is the major source of livelihood in the State and makes significant contribution to its GDP; hence, for ensuring food security and economic stability, rapid growth of *Agriculture* sector in terms of both production and productivity is essential. The SAP proposes Rs 167.20 crore (20.3 per cent) for the *Horticulture* sector. The allocation share is quite appropriate as the State presents huge scope for diversification of agriculture to high-value horticulture crops, due to favourable agro-climatic conditions of the State; it has potential of enhancing the income of farmers and creating further employment in the State. The SAP proposes Rs 138.74 crore (16.9 per cent) for *Soil & Water Conservation*. The allocation share is quite appropriate as most of the water received through abundant rainfall in the State is lost due to surface runoff and along with it a substantial amount of soil nutrient is also washed away, necessitating focus on soil and water conservation for a holistic development of *Agriculture*. The SAP proposes Rs 125.51 crore (15.3 per cent) for the *Fisheries* sector. The allocation share is quite appropriate as the State has enormous water resources necessary for the development of fisheries such as streams of water, terrace field, water bodies and swamps; *fisheries* has the potential to become a major revenue earning activity while also generating income & employment for people and contributing to food-security. The SAP proposes Rs 85.54 crore (10.4 per cent) for the *Veterinary/Livestock* sector. The allocation share is quite appropriate as the sector plays a pivotal role in supplementing family income and generating employment for the rural poor; besides it provides draft power for cultivation. The SAP proposes Rs 48.76 crore (5.94 per cent) for the *Land Resource Department*. The allocation share is appropriate as the State presents huge scope of providing employment and higher income to small & marginal farmers by supporting *land development activities* including cultivation of high-value *medicinal & aromatic plants* in the wastelands comprising fifty per cent (8.4 lakh ha) of the State's total geographical area of 16.57 lakh ha. The SAP proposes Rs 28.46 crore (3.48 per cent) for the *Sericulture* sector. The allocation share seems to be a little less as the sector entails wide scope of generating employment and income for a large proportion of population; though it has been taken-up as the primary occupation by many people in the State, yet the real benefit has not reached the larger masses due to fund constraint and inadequate technical staffs in the departments. Overall, it can be said that the sectoral allocation of funds conforms to equitable and optimal distribution of resources. Further, the spatial allocation of funds also conforms to equitable and optimal distribution of resources as the coefficient of correlation between the *population at district-level* and the *funds proposed to the respective district* (involving all 8 districts in the State as per 2001 census) is **+0.80**, indicating a strong positive correlation. In recent years, *Peren* district is carved out of *Kohima* district while *Longleng* and *Kiphire* districts are carved out of the *Tuensang* district. The district-wise funding proposals given in the SAP include the bifurcated districts; but **reliable** information as per 2001 census is available only for the integrated Kohima (that includes

population of bifurcated *Peren* district) and *Tuensang* (that includes populations of bifurcated *Longleng* and *Kiphire* districts) districts. Therefore, we have clubbed the funding proposals of the bifurcated districts under the original district for calculating the coefficient of correlation.

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

The SAP does not formally mention *innovative* projects. However, some of the proposed projects seem to be *innovative* in nature. For example, *Land Shaping/Terracing* project (Rs 13.91 crore) that is expected to develop new area for cultivation and hence increase in production of crops. Similarly, the project *Development of untapped water bodies (Marshy Land)* (Rs 2.27 crore) is expected to be useful in reclamation of a number of swampy/marshy areas in the State for fisheries which have remained undeveloped so far due to paucity of funds; the benefits of the project are likely to go primarily to small & marginal farmers.

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

The SAP proposes many projects that find their implementation in all the districts of the State. For example, *Integrated Development of major food crops* (Rs 63.24 crore), *Integrated Development of major horticultural crops* (Rs 51.27 crore), *Community Tank* (Rs 31.0 crore), *Farm handling unit* (Rs 18.0 crore), *Horticulture Link Road* (Rs 16.0 crore), *Water Harvesting Pond* (Rs 31.23 crore), *Dry Terracing* (Rs 78.0 crore), *Livestock Production and Management* (Rs 59.63 crore), *Land reforms under development of untapped water bodies* (Rs 82.36 crore), etc. However, the basis of planning certain projects for the State as a whole is not explicit in the SAP. Also, it is not explicit that how they are monitored. However, we anticipate that the projects planned for the State as a whole are those that address the agricultural needs/issues of a substantial/large part of the State as identified/perceived by the State Agriculture Department.

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.

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

The SAP proposes Rs 207.25 crore (**25.2 per cent** of the total proposed budget of Rs 822.08 crore under RKVY for the 11th FYP), Rs 229.60 crore (**27.9 per cent**), Rs 208.81 crore (**25.4 per cent**) and Rs 176.42 crore (**21.5 per cent**) for years 2008-09, 2009-10, 2010-11 and 2011-12, respectively. The given allocations across years lack a *normal* distribution and hence do not follow *prudent norm* 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, 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 due thrust on the envisaged *Agriculture Development Model* through projects proposed in the 11th FYP by focusing on *Enhanced Production, Employment Generating activities, Infrastructure Creation and Support Mechanism*, the four aspects mentioned in the *model*. 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, it includes *Monitoring* among the emerging issues mentioned in the SAP. It states that *the monitoring of project/scheme during implementation is necessary to review the physical and financial achievement as well as to generate and maintain database for future use. It is also essential to check any deviation of guidelines by the concerned departments at the time of implementation of the project, to suggest corrective measures in case of deviation, and to suggest alternative measures in case of problems arising during implementation.*

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, it includes *Monitoring* among the emerging issues mentioned in the SAP. It states that *the monitoring of project/scheme during implementation is necessary to review the physical and financial achievement as well as to generate and maintain database for future use. It is also essential to check any deviation of guidelines by the concerned departments at the time of implementation of the project, to suggest corrective measures in case of deviation, and to suggest alternative measures in case of problems arising during implementation.*

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 of the projects in terms of their respective share of funding under RKVY and other CSS/State-level schemes. 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. The SAP needs to mention the base-year values while stating the *targets*.

(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.

(x) The SAP must state the methodology adopted for the preparation of the SAP.

(xi) The SAP should attempt to estimate the yield gaps and returns in different crops/livestock/fisheries.

Overall conclusion

The SAP is well attempted but still requires significant improvements. It attempts to state targets for the agriculture & allied sectors using specifically the RKVY assistance outlay; separately, it also mentions targets that are decided to be achieved using funds (probably) other than the RKVY assistance outlay, which are mentioned as the *State Plan*. Further, the SAP also states year-wise *Physical* and *Financial* targets for each project at district-level. It also attempts to state the agricultural situation of the state through a SWOT analysis. The SAP highlights the constraints identified in the path of development of the agriculture & allied sectors and proposes strategies for their growth. The sectoral and spatial allocation of funds conforms to equitable and optimal distribution of resources. The SAP is also very much in line/ tune with overall agricultural strategy and goals of the country/ state. However, the SAP further needs to be improved upon. Firstly, it should give *methodology* for the preparation of the SAP including that on integration of C-DAPs and prioritization of interventions. Secondly, it needs to mention the base-year values while mentioning the targets decided under various agriculture & sectors, during the 11th FYP. Thirdly, it should attempt to estimate the yield gaps and returns in different crops/livestock/fisheries. Fourthly, the SAP should give examples of attempting convergence along with sources of funding (RKVY and others) for each project. Fifthly, it should mention its attempts to summarize the main experiences of implementing CSS/State schemes and state whether/how they are made use of to prepare SAP for replication, expansion etc. Sixthly, the allocation of funds across years should follow prudential allocation norms. Further, it should attempt prioritization of the proposed strategies. Also, the prioritized strategies should be translated into programmes/projects/activities by sectors and years with clear cut objectives, targets, output,

outcome, funding (RKVY, other sources) for each project. 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.