

## **NIRD; RKVY Monitoring Unit**

### **Analytical Report on Andhra Pradesh SAP**

#### **1. Name of the State**

Andhra Pradesh

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

The SAP gives two different sets of schemes, one emanating from the district agricultural plans and the other planned at the State level in the form of State-level schemes. Though, the SAP does not mention separate targets for any of the schemes (there is no mention of projects in the SAP, instead schemes are mentioned) originating from the district agricultural plans, it does indicate target for a major State-level scheme on “seed management”. However, the SAP gives projected growth-rates in various agricultural & allied sectors at the district-level (presumably comprising all schemes, i.e those arising from the district agricultural plans and the State-level schemes). The projected growth rate in agriculture & allied sector ranges from 4.6 per cent in the East Godavari district to 8.4 per cent in the Kurnool district. The projected growth rate in agriculture sub-sector ranges from 4 per cent in the Srikakulam district to 9.7 per cent in the Chittoor district. The projected growth rate in horticulture sub-sector ranges from 4.1 per cent in the Karimnagar district to 9.81 per cent in the Kurnool district. The projected growth rate in sericulture sub-sector ranges from 1.9 per cent in the Chittoor district to 37.2 per cent in the West Godavari district. The projected growth rate in animal husbandry sub-sector ranges from 4.1 per cent in the East Godavari district to 10.88 per cent in the Mahboobnagar district. The projected growth rate in fisheries sub-sector ranges from 5.2 per cent in the East Godavari and Srikakulam districts to 14.2 per cent in Adilabad, Anantapur, Chittoor, Karimnagar and Warangal districts. But, the SAP does not give such projected growth rates at the State-level.

The SAP mentions certain schemes as “innovative schemes”, presumably originating from the district-level planning, but does not give any targets for those. However, under State-level schemes, the State has decided to achieve a major target of enhancing the availability of high quality certified seeds at a reasonable cost to the farmers. The scheme will empower farmers at *mandal* level with technology of seed production and enable production of sufficient quantity of seed by multiplication of foundation seed into certified seed. The certified seed produced will be supplied from farmer to farmer at reasonable prices in the villages itself. For this State-level scheme, Rs 492.32 crores has been proposed. It is 48.9 per cent of the total funds proposed under the State-level RKVY schemes that amounts to Rs 1006.57 crores. Nearly one half of the seed production target is for the groundnut crop alone; the government aims to increase the seed replacement rate for groundnut crop from 40 per cent now to 100 per cent, during the five-year plan period.

The other State-level schemes/strategies that the SAP mentions include, strengthening of farmers’ organizations, support to the public-private partnership in agricultural

extension services, capacity building of extension functionaries and farmers, development of drought-tolerant seed varieties and implements for dry land agriculture, genetic improvement of livestock animals for better output, and improving productivity of the horticulture sector.

**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?**

Method 1 is used for the preparation of SAP. The 9 agro-climatic zones in the State were divided into 322 farming-situations based on the cropping pattern, the availability of irrigation source, the soil class, the temperature levels and the rainfall data. Yield-gap analysis for each crop was undertaken in all these farming-situations by comparing the best farmer's yield with the representative (average) farmer's yield in the same farming-situation. Factors responsible for the yield-gaps were identified through feedback received from farmers and discussions with scientists from the SAU. The block-level technology teams conducted diagnostic surveys in almost all the villages in different farming situations and identified constraints while taking feedback from a number of groups of farmers. The *Panchayat*-level data thus collected were aggregated first at the *mandal* level (comprising 15 to 20 villages), then at the ADA circle level (corresponding to *taluka* level in other states), and finally at the district level. The data collected (at *panchayat*-level) on area, production, productivity, problem soils etc. were validated at the *mandal* level. The thrust areas were identified. Farmers' feedback included their objectives and concerns on increasing productivity, building up of soil fertility, market-oriented production, mechanization and micro-irrigation to improve precision and resource productivity. It was followed by the planning for crop production-strategies and estimating investment requirements. Finally, focus was given on the administration of the identified interventions. The *mandal-parishad* of 1104 *mandals* of the State was chosen as the administrative-unit for implementation purpose as extension-system existed for various departments at that level. The 322 farming situations were superimposed on the 1104 *mandals* to have *mandal*-level farming situations covering all the crops grown in that *mandal*. Using *mandal*-level information as base data and utilizing the already conducted yield-analysis, the *mandal*-level crop sector agricultural plans were prepared jointly by the SAU and the agriculture departmental teams. Horticulture and sericulture were included in the *mandal*-level agricultural plan. Animal Husbandry and Fisheries Departments similarly developed their *mandal*-level plans separately to be integrated later into the District Agricultural Plan. The *mandal*-level information was then aggregated to the ADA circle-level as the standard formats by the government of India required reporting of results by *taluk* (similar to the ADA circle). **The departmental plans looked at the availability of resources from existing schemes and the balance amounts required for the interventions were shown as additional funds needed for that intervention at the district level.** The State plan has integrated all the district plans and prioritized major interventions (schemes) to prepare the State level agricultural plan.

**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**

Yes, SAP has attempted to critically analyze and clearly state the agricultural situation of the state, but lacks a systematic SWOT analysis; *SWOTs are systematically stated in the C-DAPs*. However, the following SWOTs are **discerned** from the SAP.

Major strengths of the State include a variety of soils, diversified cropping pattern, existence of various rivers and their tributaries that feed the irrigation systems - *a high 75 per cent dependability (for irrigation) of the total surface water of entire river systems of the State*, and the progressive nature of farmers.

Notable weaknesses include poor soil fertility in majority areas (65 per cent of the State's land area; *at national level it is 20 per cent of India's land area*) and a low level of average annual rainfall (State's average annual rainfall at 925 mm is lower than the national annual average rainfall at 1150 mm) with a high degree of variation across locations and years. Agricultural productivity of rain-fed areas is much lower at the State-level than at the national-level. State's rainfed gross cropped area (which is 62 per cent of the State's total GCA) contributes 22 per cent to its agricultural production as compared to 44 per cent contribution by the rainfed areas (65 per cent of total GCA at national level) to same at the All-India level.

Important opportunities include the favourable price and demand situations for agricultural products, availability of new high-yielding varieties and new cultivation methods – *government intending to subsidize supply of hybrid seeds*, and emergence of an environment that favours institutional agricultural-investment in the State. Prominent threats include increasing soil-degradation adversely impacting input productivity; high incidence of droughts, floods, heavy rains and cyclones; and a greater increase in agricultural-costs vis-à-vis crop-prices – *making farming un-viable in rain-fed areas, raising credit requirement of farmers and increasing dependency on private money-lenders in absence of institutional credit*.

**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?**

Yes, convergence - inter and intra department/programmes- has been attempted to a great extent. *The SAP mentions that the planned interventions (under RKVY) are first attempted to be fulfilled through the available resources (PP 11)*. The SAP exhibits convergence between the RKVY scheme (Ministry of Agriculture) and other complementary schemes (run by the same ministry or a different ministry) such as the National Rural Employment Guarantee Scheme (MGNREGS) (Ministry of Rural Development) and the Backward Region Grant Fund (BRGF) (Ministry of Panchayati Raj). Convergence is also attempted by the objective of the schemes. For example, RKVY shares the objective of *yield improvement* with two other schemes, the National Horticulture Mission (NHM) and the National Food Security Mission (NFSM); it shares the objective of *income enhancement* with NHM, NFSM and Extension Reforms (ATMA), all schemes under the Ministry of Agriculture. The list of interventions/activities under

RKVY scheme that have convergence with other related schemes/programmes is quite long. All these suggest that all potential options for convergence have been attempted.

**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?**

It is not explicit in the SAP whether the experience of on-going CSS and State schemes has been studied and lessons learnt have been incorporated in SAP/C-DAPs for replication/expansion/modification in uncovered areas. Since the SAP involves a high-level of convergence with other ongoing-schemes, it is inferred that lessons learnt must have been utilized.

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

Yield-gap analysis has been conducted for each crop in all the 322 farming situations identified in 9 agro-climatic zones of the State. The yield gaps and returns in different crops have been estimated by comparing the best farmer's yield with the representative (average) farmer's yield in the same farming-situation. According to the SAP, the plans for livestock and fisheries sectors have also been similarly developed, indicating estimation of yield-gap in these sectors. However, the SAP provides only the methodology for yield-gap estimation, but does not give quantitative values on yield-gaps either at district-level or at the State-level.

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

The factors responsible for yield-gaps were identified through feedback received from farmers and discussions with scientists from the SAU. The block-level technology teams conducted diagnostic surveys in almost all the villages in different farming situations and identified constraints while taking feedback from a number of groups of farmers. The *Panchayat*-level data thus collected were aggregated at *manadal*, ADA circle and district-levels. The major yield-gaps were on account of the differences in knowledge, skills, awareness and resources between the progressive and the average farmers. The SAP does not give specific-details of which are the factors responsible for the yield-gaps by crops or by agriculture-sectors.

**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?**

SAP gives impression that the identified constraints are adjudged responsible for low crop productivity in general and specific crops in particular, on the empirical basis. It mentions of receiving feedback from farmers during village-level survey and discussions with scientists from the SAU, for identifying the underlying constraints. However, the SAP though adjudges the differences in knowledge, skills, awareness and resources responsible for low productivity, yet it does not give details of these constraints.

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

The interventions are identified to bridge the gaps in productivity levels through feedback received from farmers during village *Panchayat*-level surveys. This feedback helped in deciding the thrust areas/interventions for increasing productivity. The other concerns emanating during the process include, *building up of soil-fertility, market-oriented production, mechanization and micro-irrigation to improve precision and resource-productivity.*

**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 seems to have attempted prioritizing and clearly spelling out the right strategies to bridge the yield gaps in crop/livestock/fisheries and maximize returns to farmers. The strategies include, improvement of productivity of different commodities to increase production, reclamation of problem soils and putting fallow lands under plantations, building up of soil fertility, market oriented production, mechanization and micro-irrigation to improve precision and resource productivity.

Formulation of the SAP involves data and feedback collection from farmers at village-level and discussions with the SAU scientists. This gives an impression that empirical basis has been provided for appropriate strategies. Further, the facts that farmers' feedback has played major role in identifying various interventions, and that the SAU scientists have been consulted during the process, indicate that the strategies have been obtained/decided through a consultative process with the relevant stakeholders.

**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 prioritized strategies have been translated into schemes by sectors but not by years. The schemes emanating in the SAP by integrating respective C-DAPs seems to have been given under heading *innovative schemes proposed in XI plan.* However, allocation for the five-year plan period is not explicit against these schemes. Certain State level schemes are proposed under the RKVY which have been approved by SLSC. Allocations against these schemes only are stated for the five-year plan period as a whole.

Objectives, targets, output and outcome are generally not given against the schemes. But in case of the *seed management* activity/scheme, the SAP mentions a target of increasing the *seed replacement rate* of the State from current 40 per cent to 100 per cent in next five years. However, the SAP does provide projected growth rates for the various sub-sectors of the agriculture & allied sector at district-level.

The SAP provides instances indicating viability studies done of projects to achieve expected output. For example, a proposed scheme for taking up marginal land (some of

which are unviable for crop-cultivation) for plantations is based on successful trials on research stations of trees yielding timber, bio-fuel and pulp on the less fertile lands.

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

The border areas/ insurgent areas/problem areas (mining, acidic soils etc) have not been addressed by formulating any specific projects. However, there is a proposed scheme for taking marginal lands (some of which are unable to yield viable crop yields) for plantations.

**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 proposed allocation in the SAP for the five-year plan-period is Rs. 7110.26 crores. Additionally, an amount of Rs. 1006.57 crores has also been allocated for various state level activities. An amount of Rs 819.70 crores have been approved for the first three years of the plan, i.e. 2007-08 to 2009-10. The released amount for the same period is Rs 768.25 crores.

There is considerable mismatch (about 90 per cent) between the proposed allocations and the approved funds. The SAP does not mention how the mismatch affects the targets, expected outputs/outcomes/growth impact. It simply states that the proposed allocations are based on project analysis and are crucial for achieving projected growth rates in various districts.

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

Some of the projects planned for the State are large enough to make a visible (impact) in the sectors. The average project cost for four-year period from 2007-08 to 2010-11 is Rs 11.39 crores. Project cost under "seed management" programme for years 2007-08 and 2008-09 are Rs 42.90 crores and Rs 32.90 crores, respectively. Project cost for project "strengthening & improving the reach of agricultural extension services" is Rs 13.00 crores for 2007-08. Project costs for "induction of milch animals", "soil health management", "integrated vegetable production techniques" and "farm mechanization" projects are Rs 14.81 crores, Rs 16.26 crores, Rs 19.578 crores and Rs 29.64 crores, respectively for year 2008-09. Large projects for year 2009-10 include, "strengthening of seed chain i.e. distribution of high yielding improved crop seed" (approved project cost Rs 100.00 crores); "drought contingency plan – alternate crop seed distribution on 50 per cent subsidy" (approved project cost Rs 55.00 crores); "induction of milch animals" (approved project cost Rs 43.63 crores); "intensified mechanization" (approved project cost Rs 18.70 crores); and "integrated vegetable production techniques" (approved project cost Rs 26.57 crores). But there is much greater number of the smaller size projects.

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

SAP does not explicitly state any of the programme as the *Flagship programme*. However some of its proposed State-level schemes are large enough and are meant to be implemented across various districts in the State. For example, a major programme on “seed management” aims to enhance the availability of improved varieties of seeds at reasonable cost to farmers in the State. This programme has been earmarked Rs 492.32 crores for the plan-period.

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

The SAP gives sector-wise distribution of resources separately for schemes originating from respective district agricultural plans and projects planned under state-level schemes. For schemes originating from district agricultural plans, share of agriculture sub-sector is 50 per cent in total proposed allocation to the agriculture & allied sector of Rs 7110.26 crores. This is understandable as agriculture is the largest sub-sector of the broad agriculture & allied sector that has major share in contribution to the sectoral GDP. Horticulture stands second with a percentage share of 16 per cent in total proposed allocation. Horticulture is a high-growth sub-sector. It is getting popular among farmers. It has less water-intake than crops like paddy and sugarcane. With the availability of better quality seeds, it presents huge potential for farmers. Marketing-infrastructure has a share 14 per cent in proposed allocations. Development of markets and infrastructure is very important for growth in agriculture & allied sector. Animal husbandry has been allocated a share of 12.7 per cent in proposed allocations. The State government has stated in the plan the need of induction of milch animals and heifer calves at a substantive scale to tap the potential for increased milk-production in the State.

The SAP also gives scheme-wise proposed allocation of funds to different sub-sectors under agriculture & allied sector, for schemes planned at the State-level. It amounts to Rs 1006.57 crores. The projects proposed at the State-level give the impression of their impact on a wide area that encompasses several districts. The sector-wise distribution of funds seems quite logical. The “Seed management” programme has been given highest share of 49.8 per cent in the total proposed allocation. This program aims at enhancing the availability of certified seeds to farmers at village level at a reasonable cost. The State Government identifies the non-availability of improved variety seeds to farmers, particularly of the groundnut crop, as a major constraint in the way to achieve a high growth rate in agriculture. Also, resource constraint has been identified as a factor behind yield-gaps during village level field-surveys. Since availability of better quality of seeds at low cost is an important aspect of overall resources, the allocation for it is appropriate. 22.7 per cent of the total state-level allocation has been proposed for the broadband connectivity. The fast-speed Internet connectivity is crucial for enhancing efficiency in implementation and monitoring of various projects. Thus the share of allocation to broadband connectivity is commensurate with the need. Further, projects

under capacity-building / training of farmers and extension personnel have been given a share of 11 per cent. It is justified as lack of knowledge and awareness among farmers has emerged as major reason for the yield-gaps, besides the resource-constraint, during village-level field studies. Projects for developing drought tolerant varieties of various food-grain and oilseed crops using biotechnology approach have been given a share of 9.9 per cent in the total allocations. This is understandable as 62 per cent of the State's gross cropped area is rain-fed and State's average rainfall is less than the national average. The State frequently suffers from drought. Thus sector-wise allocation of funds seems to be equitable and optimal.

There is a moderate degree of correlation to the tune of 0.51 between the proposed allocations for projects originating from district agricultural plans and the district-population. However, district-wise allocations are not given for projects planned under the State-level schemes.

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

The SAP identifies a number of innovative schemes. For example, the scheme of "model farmer" aims to bridge the extension gap by serving as an effective link between extension officers and farmers. These model farmers will be given opportunities to imbibe the latest technologies from scientists and extension workers. They may then effectively transmit the information to other farmers. "Model farmers" will be provided with some honorarium to cover their expenses. This scheme will prove to be very useful in making farmers aware/knowledgeable while fulfilling their informational requirements as farmers also need someone locally to whom they can look at as a friend and guide.

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

The schemes planned for the state as a whole are those that have significance for all the districts. For example the schemes on "seed management" aim to make available certified seeds to State's farmers at low cost and transfer to empower farmers at *mandal*-level with the technology of seed production. The SAP does not indicate mechanism for monitoring of State level schemes.

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

Though the basis of sectorial fund allocation is not explicit in the SAP, yet we may infer it to be on account of field-surveys and use of their own insight by the State agricultural department regarding State's investment needs. The SAP mentions of conducting systematic field-surveys at village level to get farmers feedback while also collecting data for yield gap-analysis. The *mandal*-level plans are integrated to ADA circle-level, which in turn are integrated to the district agricultural plans. Consultations done during the process with SAU scientists is also mentioned. Thus contribution of field-studies may also be considered to have formed basis for the sectorial fund allocation.

It seems that funds are allocated sectorially on the basis of expected marginal contributions. A huge share of 16 per cent to horticulture sector in the total proposed allocations for projects originating from district agricultural plans is testimony of it.

There is an instance of a viability study done for a proposed scheme to take up plantations in marginal lands. The trials on research stations confirmed the economic-viability of plantation crops on less fertile lands.

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

The SAP unlike C-DAPs does not give allocations across years. This may be considered as a limitation of this SAP.

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

Yes, the SAP is in line/ tune with overall agricultural strategy and goals of the country/ state. For example SAP's thrusts towards agriculture sub-sector as a whole and "seed management" in particular is an attempt to quickly enhance productivity of crop sector by reducing yield-gaps. Thereby, it contributes towards objective of country/State to achieve 4 per cent growth rate in agriculture & allied sector by tapping the potential for productivity improvement.

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

Though SAP provides methodology for preparation of the SAP, but mechanisms for planning, baseline information collection, monitoring, documentation and regularly reporting progress are not explicit in it. But, a dedicated PM&E cell is now established and functioning.

**Directions for 12<sup>th</sup> 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 11<sup>th</sup> FYP and 12<sup>th</sup> FYP when it gets launched? Whether the baseline information is maintained for comparison of performance of the project later?**

There is a dedicated PM&E cell established for planning, project screening, monitoring, data entry, evaluation and reporting work. It is not explicit whether 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?**

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 12<sup>th</sup> FYP?**

- (i) The SAP should give expected outcomes of implementing proposed interventions (schemes) at the State level (though it gives projected growth rates for various agriculture & allied sectors at the district-level).
- (ii) The SAP should explicitly mention target for agriculture & allied sectors / sub-sectors to be achieved using RKVY funding during 11<sup>th</sup> five-year plan.
- (iii) The SAP should systematically state the strengths, weaknesses, opportunities and threats with respect to the agriculture & allied sectors of the State as has been done at the district level.
- (iv) The SAP should provide yield-gap estimates, both at State and district-level, for major crops and other enterprises. It should clearly spell-out the specific factors responsible for the yield-gaps.
- (v) The SAP should clearly state the lessons learnt from the on-going CSS and State schemes and how they have been used in the preparation of SAP/C-DAPs.
- (vi) The SAP has not given yearly allocations by sectors/districts. However they are available in the C-DAPs by sectors, schemes and years.
- (vii) One of the positive features of the SAP indicating convergence of resources is that it provides the resource requirements for various sectors and by districts under RKVY vis-à-vis other sources of funding.
- (viii) Prioritization of interventions needs to be attempted using standard objective methods, though they have followed a bottom up approach (from *mandal*-level upwards) of arriving at concerns and priorities, combined with suggestions of scientists and other stakeholders.
- (ix) The SAP has stated broad innovation schemes but not attempted to articulate specific programmes/projects/activities along with required budget by years.
- (x) The mismatch between proposal and allocation in the last three years is about 90 per cent which should be minimized.
- (xi) The project proposals should emanate from Districts preferably Zilla Parishads on the basis of C-DAPs.
- (xii) There should be rigorous filtering of proposals by an expert Committee earlier and in SLSC meetings later.
- (xiii) There is a dedicated PM&E cell at the State level for facilitating project planning, budgeting, screening of proposals, database management, monitoring, evaluation and reporting of RKVY projects. This should be strengthened.

#### **Overall conclusion**

In general the SAP is well-prepared and brief with information on the agricultural situation, concerns of agriculture sector, general description of the Andhra Pradesh State, methodology followed in the preparation of SAP and vision and strategy development. However, the empirical support to the above statements is not provided. The C-DAPs are comprehensive, prepared using the Planning Commission guidelines and provide all the needed details. The SAP has not given annual allocations and also not spelt out specific programmes/projects/activities which can explicitly contribute to higher growth. The SAP has earmarked about 1000 crores under State-level schemes to support some critical schemes in

the overall interest of the State. Another noteworthy feature of the SAP as well as C-DAP is bringing about clear convergence among RKVY and other schemes. There is still a mismatch between the proposed allocation and the total outlay of approved schemes in the last three years. This needs to be bridged if the projected growth rates stated for different districts are to be achieved. The background analysis clearly states the critical need of strengthening irrigation-infrastructure, particularly surface irrigation, but there is no commensurate emphasis given in the budget allocation. It is again important to note that the State has established a dedicated PM&E cell which needs to be further strengthened. State has to address these limitations and other lessons learned (item 4 above) in the remaining years of 11<sup>th</sup> FYP and more so in the 12<sup>th</sup> FYP, when the RKVY projects gets continued to achieve the projected targets.