### **EXECUTIVE SUMMARY**

A number of extension programmes have been implemented over the years during both preand post-Indian Independence for the delivery or transfer of agricultural technology to the
farmers through non-formal education such as training and visit extension programme etc.
These projects have ensured all round holistic development of the rural populace.
The training and visit programme saw much success. However, owing to certain drawbacks
of this programme, the Government of India through the Ministry of Agriculture and the
assistance of National Institute of Agricultural Extension Management (MANAGE),
Hyderabad designed a new extension pilot project correcting these limitations and adding
some more reforms. Thus, with much success achieved through this pilot project, the GoI
officially launched the new centrally sponsored scheme called "Support to State Extension
Programmes for Extension reforms" and started setting up of Agricultural Technology
Management Agency (ATMA) in 588 rural districts in India in 2005 to implement this
scheme.

The ATMA scheme aims to facilitate and strengthen extension delivery system in the state through gap filling mode so as to ensure effective and all-round location specific technology transfer to the farmers through participatory approach thereby making extension system farmer driven. ATMA Scheme is under implementation in 640 districts of 29 States & 3 UTs of the country.

Main objectives of the scheme are to promote decentralized farmer-driven and farmer-accountable extension system through an institutional arrangement for technology dissemination in the form of an ATMA, encourage multi-agency and broad-based extension strategies, adopt group approach to extension and facilitate convergence of programmes in planning, execution & implementation at district level.

Under the scheme grants-in-aid is released to the States/UTs with an objective to support State Governments efforts in revitalizing the extension system and making available the latest agricultural technologies in different thematic areas to increase production in agriculture & allied sectors through a cafeteria of activities which include farmers training, demonstrations, exposure visits, Kisan mela, mobilization of farmers groups, setting up of farm school, innovative technology dissemination, research-extension linkages etc.

The centrally sponsored scheme is being implemented in Karnataka on a 60:40 sharing pattern between Government of India and Government of Karnataka.

#### ToR Enclosed as Annexure-1

List of cafeteria of activities enclosed in Annexure-2

# 1.10bjectives of the scheme

➤ The ATMA model of Agriculture extension system has been introduced to "Support the State Agriculture Programmes for Extension Reforms.

- Encouraging multi-agency extension strategies involving in public private extension service providers.
- Ensuring an integrated, broad-based extension delivery mechanism consistent with farming system approach with a focus on bottom-up planning process.
- Adopting group approach to extension in line with the identified needs and requirements of the farmers in the form of CIGs and FIGs and consolidate them as farmers producer organization.
- ➤ Facilitating convergence of farmer centric programme in planning, execution and implementation.
- Addressing gender concerns by mobilizing farm women into groups and providing training to them.

### 1.2 Need for evaluation of ATMA scheme

The ATMA scheme provides for a third-party evaluation of the activities at State, districts and taluk level. It involves the evaluation of all the activities undertaken to achieve programme objectives. The information generated through this evaluation is proposed to be used for improving implementation of the programme by focusing on corrections. With these objectives the task of 'concurrent monitoring and evaluation of the Scheme during the year 2018-19 has been assigned to "Center for Symbiosis of Technology, Environment & Management" Bengaluru.

Since the inception of the scheme in the State, Concurrent Monitoring and Evaluation of the Scheme has been done during the year 2015-16, 2016-17 and 2017-18. Thus, the GoK has felt is necessary to evaluate the scheme implemented during 2019-20 to identify the gaps in planning and implementation.

The inception report was approved on 27<sup>th</sup> March 2020. Further, the STEM was advised by the Agriculture Department and KEA to change the evaluation period from 2018-19 to 2019-20, through a meeting held on 24<sup>th</sup> June 2020 at KEA.

### 1.3 Objectives of concurrent monitoring & evaluation

- ✓ To assess whether the scheme activities are planned and implemented in the frame work of the ATMA guidelines 2018.
- ✓ To assess the progress of the scheme in terms of achievement of physical and financial targets.
- ✓ Assess the convergence of activities of participating allied sectors for better results in planning and implementation of ATMA activities
- ✓ To assess the extent of adoption of prescribed process in planning at taluk and district levels.
- ✓ To assess the formation training and other aspects of social mobilization through farmer groups and food security groups.

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- ✓ To assess the functioning of ATMA institutions like SFAC, ATMA GB, DFAC, and BFAC
- ✓ To assess the involvement of KVKS and SAUS in the planning and implementation process.
- ✓ To assess the impact of the implemented activities in respect of number of farmers benefitted, number of weaker sections of farmers benefitted like SC, ST, and women.
- ✓ Role & participation of women and their representation in ATMA activities and farmers advisory committees
- ✓ Level of involvement of NGOs, AC& ABC trained personnel and input dealers.
- ✓ To assess the impact of the scheme on adoption of technology, cropping pattern, knowledge base and farming practices of the farmers.
- ✓ To examine the impact on production, productivity and yield across the division

### 1.4 Purpose of evaluation

The purpose is to examine the implementation process and assess the achievements of physical and financial targets and the impact of the scheme and to get the necessary feedback for further improvement.

### 1.5 Scope of evaluation

The ATMA scheme is being implemented in 29 districts of the state in four Revenue Divisions. The scheme activities planned and implemented during 2019-20 have been covered during the concurrent monitoring & evaluation. One sample taluk in each district has been selected to evaluate the taluk level activities.

#### 1.6 Evaluation tools

As a guide to the evaluation a set of evaluation questions, sub questions, indicators, data source, data collection method and data collection instruments were designed to collect the secondary information from different sources.

## 1.7 Methodology

A study team was constituted to collect data, conduct focused group discussions and interview with beneficiary farmers and others involved in the ATMA activities. The team has also tabulated analyzed, interpreted and prepared the Final report.

The ATMA scheme activities are being planned and implemented at five levels viz: State, SAMETIs, district, taluk and village levels throughout the state.

To assess the evaluation questions secondary data from the Directorate of Agriculture at State level, office of the Deputy Director of Agriculture (Project Director) at district level and Assistant Directors of Agriculture in sample taluks has been collected. Also, data has been collected from SAMETI (S) UAS, Hebbal located at Bengaluru. & SAMETI (N) located at

UAS, Dharwad.

The primary data at taluk and village levels from the beneficiary farmers also has been collected.

The secondary & primary data collected in one round.

Focused group discussions have been held at taluk and village levels with concerned officers and beneficiary farmers.

The study team held collective discussions with the Government functionaries under the nodal Department i.e., Department of Agriculture and the allied Departments. The required information was collected by conducting personal interviews/observations, group discussion and interactions etc. with the respective stakeholders.

### 1.8 Findings

Based on the analysis of the primary and secondary data made available by the beneficiary farmers and officers of the ATMA scheme the following findings have been made.

- 1. The physical progress in terms of the number of activities implemented during 2019-20 is between 18 and 29 against a target of 28. The highest number of activities implemented are in Ramanagara, Bengaluru urban and Hassan districts. The lowest number of 18 activities have been implemented in Dharwad district followed by Bagalkot district.
- 2. The financial progress achieved is between 65 percent and 103 percent in different districts. The lowest achievement of 65 percent is in Ballari district and the highest of 103 percent is in Belagavi district. The achievement is against the target fixed in the approved annual action plan for 2019-20.
- 3. The overall average expenditure in the state is 85.4 percent. Expenditure towards the activities is 37 percent of the total expenditure whereas the expenditure towards manpower and administration is 63 percent.
- 4. The financial allocation in allied sectors is 4.5 percent. Against a financial expenditure of 1706 lakhs earmarked for ATMA activities, an amount of Rs 42.79 lakhs only has been spent by the allied sectors activities. This works out to 2.5 percent of the expenditure under ATMA activities.
- 5. The annual action plans approved at State level has been divided among 29 districts and these district targets have been further divided among the taluks in each district and sent for implementation at taluk and district levels. Annual action plans have been prepared by the Assistant Director of Agriculture in the taluks of Chikkaballapur, Chitradurga, Ramanagara and Uttara Kannada districts. An attempt has been made by the ADAs of these taluks to submit the annual action plans to their Project Directors for further action.

- Bottom-up approach of preparations of annual action plans reported but it was done based on discussion with farmers in the other districts.
- 6. The allied sectors, namely Horticulture, Sericulture, Animal Husbandry, Fisheries and Forestry need to be involved in the planning process in all districts.
- 7. The district level ATMA Governing Boards constituted from 2017 to 2019 are functioning in the 29 districts. The modified ATMA guidelines have come into effect from October 2018.
  - A. The ATMA Governing Board (GB) is a policy making body which provides guidelines, reviews and monitors the progress and function of ATMA. The board has to have 7 farmer representatives and 3 other members as its members from different fields. During 2019-20, the boards have a women farmers representation of non-official members a minimum of 1 in Mandya and Mysore districts to a maximum of 13 in Bagalkot district. The governing boards have a women representation of 'Nil' in Shivamogga, Chikkamagaluru and Mandya districts. The other districts have a representation of 1 to 6 women farmers. This woman farmers representation is against a minimum of 3 in each governing board. The SC/ST farmers representative is adequately represented in all districts except Udupi and Yadgir.
  - B. For effective functioning and guidance to ATMA, governing board has to meet every quarter. It is observed that the governing boards of Ramanagara, Vijayapura and Ballari are yet to meet.
- 8. District Farmers Advisory Committee (DFAC) is a body to provide farmers feedback for district level planning and implementation.
  - A. The DFAC have been constituted in all the districts. The term of each DFAC is 2 years with new set of farmers. The committees have been formed during 2017, 2018 and 2019. The DFACs formed during 2017 should have been reconstituted by 2019 as per the ATMA guidelines 2018.
  - B. The DFACs should comprise of not more than 40 members. The committees working at present have a minimum of 15 members in Udupi and Haveri districts followed by Mysore and Dakshina Kannada which have 30 members.
  - C. The DFACs have to meet at least four times in a year i.e., once during each quarter. The districts of Chikkaballapur, Chitradurga, Chikkamagaluru, Kodagu, Udupi, Vijayapura and Kalaburagi have not met even once during the year. The other DFACs have met 1 to 4 times with a maximum of 4 in Belagavi, Gadag and Haveri district.
  - D. DFAC has to have 5 state level awardee farmers from Agriculture and allied sectors. The committees in the districts of Bengaluru Urban, Chikkaballapur, Chikkamagaluru, Kodagu, Dharwad, Vijayapura and Kalaburagi do not have awardee farmers. Other districts have a representation of 1 to 10.
  - E. Representation of SC/ST farmers is not observed in the districts of 5 Karnataka Evaluation Authority

- Chikkaballapur, Kolar, Chikkamagaluru, Kodagu and Kalaburagi districts. Other districts have a minimum of 1 SC/ST farmer to a maximum of 11 SC/ST farmers in their committees.
- F. Women farmers have not been represented in the DFACs of Chikkaballapur, Ramanagara, Shivamogga, Chikkamagaluru, Kodagu and Kalaburagi districts. Other districts have between 1 to 8 women farmer members on their committees.
- G. Block Farmers Advisory Committee members (BFAC) / Chairman have not represented the committees in the districts of Bengaluru Urban, Chikkaballapur, Chitradurga, Davangere, Chikkamagaluru, Hassan, Kodagu, Mandya, Vijayapura, Bidar, Kalaburagi and Raichur Districts. In other districts the representation is between 1 to 20.
- 9. The Block Farmers Advisory Committee at taluk level act as an agency for providing farmers feedback and inputs for preparation of annual action plans.
  - A. The BFAC have been constituted in all the sample taluks during the years 2015-16 to 2019-20. Term of each BFAC is 2 years after which new set of farmers have to constitute the BFAC.
  - B. The BFAC at taluk level has to meet once in a month during the season and quarterly in lean season. Thus, the number of meetings to be conducted varies from taluk to taluk depending upon the cropping season. Number of meetings conducted in each taluk ranges from 1 to 6. Maximum number of 6 meetings have been conducted in Chikkodi taluk of Belagavi district followed by Bengaluru North, Sagara, Sakleshpura and Gadag taluks.
  - C. The Block Farmers Advisory Committee in each taluk has to comprise of not more than 30 members. The members include one Chairman of taluk Panchayat Samiti, all members of Zilla Panchayat in the taluk and 25 progressive farmers. Data indicates that the number of members in each sample taluk varies from a minimum of 17 in Karkala taluk to a maximum of 30 in Bangarpete taluk. The number varies from taluk to taluk depending upon the number of Zilla Panchayat members in each taluk.
  - D. The SC/ST farmer's representation in each sample taluk varies with a maximum of 8 in Chikkaballapur taluk followed by Ramanagara and Shahpur taluks.
  - E. Representation of women farmers in the committees is adequate in all taluks except Bengaluru North, Chikkaballapur, Chitradurga, Davangere, Ramanagara, Chamarajanagar, Nanjanagudu, Karkala, Hospete, Bhalki, Aland, Yelaburga and Raichur taluks.
- 10. All districts have adopted the conventional mode of dissemination to transfer the technologies related to Agriculture and allied sectors. In addition to these Ramanagara, Gadag districts have used videos and video clippings to disseminate the

- technology. Kalaburagi district has developed technology packages on local issues. Belagavi district has also adopted Facebook, Youtube and Whatsapp social media platforms to disseminate the technology.
- 11. Non-governmental agencies like NGOs, ACABC trained agri-prenuers and DAESI trained input dealers have not been involved in the planning and implementation process. A few NGOs in the districts of Chikkaballapur, Shivamogga, Mandya, Mysore, Udupi, Dharwad, Haveri, Koppal have been entrusted with the tasks of conducting trainings, exposure visits, group formation as resource persons.
- 12. Eight percent of scheduled caste farmers and 4 percent of scheduled tribes' farmers have derived benefits from the farmer-oriented activities.
  - The women beneficiaries account to 30 percent of the total beneficiaries.
- 13. The farmer-oriented activities have been implemented by ATMA functionaries. In the sample taluks where allied sectors activities are implemented by respective sector, it has been done independently. Convergence of activities either at planning stage or at implementation stage to be encouraged.
- 14. The two SAMETI's at Bengaluru and Dharwad have actively involved in arranging orientation and refresher training programmes to ATMA functionaries, officers of allied sectors and non-governmental agencies.
- 15. The designated Krishi Vignana Kendra's (KVK) in all the districts have facilitated the ATMA to the desired level.
- 16. The ATMA activities have been implemented in the districts in all the months for the financial year 2019-20.
- 17. The ATMA activities have been implemented during all the months of financial year 2019-20. About 90 percent of the activities have been implemented from August 2019 to March 2020.
- 18. The ATMA functionaries at district, taluk and hobli level are spending about 60-70 percent of their time and energy in implementing the schemes and programmes of Agriculture Department in addition to ATMA activities. This aspect has been confirmed during focus group discussions with the Assistant Directors of Agriculture and interviews with Project Directors & Deputy Project Directors (ATMA).
- 19. The impact of the scheme on the farming practices, cropping pattern, production and yield of crops needs further improvement.
- 20. The knowledge base and awareness of the farmers with regard to farming practices and improved technologies has shown an increase among the beneficiary farmers.
- 21. Eighty one percent of beneficiary farmers have opined that the ATMA activities conducted ranging from good to very good. About 35 percent have said the activities were very good and 46 percent have said the activities were good.
- 22. Fifty one percent of the beneficiaries have asked for increase in the activities under trainings, exposure visits and new technologies.

#### 1.9 Recommendations

#### **Short-term practicable**

- 1. The annual action plans should be prepared before the start of the financial year based on the research extension priorities identified for the districts in the SREP (Strategic Research Extension Plan) and keeping in mind the agro-ecological conditions and existing gaps in technology and dissemination in all agriculture and allied sector areas.
- 2. Bottom-up approach in the preparation of AAPs and allocation of resources should be followed at different levels. The planning at district & taluk levels needs to be strengthened.
- 3. More allocations should be made for farmers-oriented activities during planning than administration and manpower component.
- 4. Allied sectors like Horticulture, Sericulture, Animal Husbandry and Fisheries should have been more effectively involved in ATMA activities based on the priority of each sector in the taluks. Allied sector wise AAPs need to be prepared each year involving the allied sectors in the planning process.
- 5. Allocation of resources to each major group of ATMA activities should be done as per financial allocation prescribed in the guidelines.
- 6. The expenditure towards the manpower and administration far exceeds the expenditure incurred towards ATMA activities taken up for farmers. All possible efforts should be made to bring down the administration costs and manpower expenditure to the extent prescribed under the ATMA guidelines.
- 7. The Farmer Advisory Committees at districts and taluk levels have to be reconstituted in the districts and taluks as per ATMA guidelines 2018.
- 8. Adequate representation of SC, ST & women farmers as prescribed under the guidelines in the farmer's advisory committees needs to be taken up in districts and taluks.
- 9. The quarterly meetings of SFAC, ATMA GB, DFAC needs to be conducted periodically at regular intervals in State, districts & taluk levels as per ATMA guidelines 2018.
- 10. The monthly meeting of Block Technology Teams (BTT) headed by the Assistant Director of Agriculture has to be conducted compulsorily every month in all the taluks.
- 11. The BFAC meetings of taluks need to be conducted every month during cropping season and quarterly during lean season in each taluk.
- 12. The involvement of allied sector in planning and implementation of ATMA activities

- at field level is very meagre, physical & financial allocation to these sectors need to be enhanced proportionate to the sectoral activities undertaken in each taluk and districts.
- 13. Farmer oriented activities pertaining to allied sectors needs to be implemented by the concerned allied sector agencies which will lead to have higher impact on the outcome.
- 14. Convergence with government and non-governmental sectors has to be ensured for effective planning and implementation of the scheme objectives. Officers concerned at district and taluk levels need to be trained in convergence schemes available under State and Central Government programmes.
- 15. The presence of Deputy Project Director of ATMA at district level need to be ensured during the scheme period for effective planning and implementation of the scheme.
- 16. The concurrent monitoring and evaluation study by third party should begin at least by the end of first quarter of the financial year. So that monitoring of the activities is done during implementation process.
- 17. The impact of the ATMA activities on the crop production aspects should be initiated during the succeeding year.
- 18. Involvement of non-governmental organizations, ACABC trained personnel and DAESI trained input dealers should be ensured for realizing the objectives of the scheme.
- 19. ATMA functionaries at district, taluk and hobli level should be allowed to devote more time for planning and implementing ATMA activities.
- 20. Efforts need to be made for improving the participation of SC/ST farmers in ATMA activities in the districts of Ramanagara, Belagavi, Gadag and Uttara Kannada districts.
- 21. More trainings and exposure visits need to be organized and aspects like marketing linkages, value addition and income generating activities should be also considered.