



## Research Article

# VILLAGE SECRETARIAT IN ANDHRA PRADESH VIS-A-VIS INSTITUTIONAL INNOVATION AND ITS MODUS OPERANDI FOR AGRICULTURAL INTENSIFICATION

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**Abstract:** Agricultural intensification provides employment opportunities, prevents migration and could address the reverse migration in the aftermath of sustained covid-19 pandemic situation. This paper proposed framework for concerted efforts of village secretariat functionaries, a novel initiative of Government of Andhra where in elements like pre work shop training, capacity building to conduct PRA/RRA for data base creation through Agricultural Intensification Kit including Agro Economic Survey, Scaling Up Proforma and Questionnaire for Village Level Functionaries and finally brainstorming through a series of district wise and mandal wise work shops were discussed to herald ever green revolution in Andhra Pradesh.

**Keywords:** Agricultural Intensification, Agro Economic Survey, Covid-19 pandemic, Institutional Innovations

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## Introduction

With 13 districts and with a geographical area of 1,62,970 SqKm, Andhra Pradesh ranks as the 8th largest State in the country. Situated in a tropical region, the state has the 2<sup>nd</sup> longest coastline in the country with a length of 974 km. In terms of population, Andhra Pradesh is the tenth largest state in the Country accounting for 4.10 percent of the total population of the country, as per 2011 Census. The land utilization classification reveals that 37.12 percent of the state geographical areas is under net area sown, (60.49 lakh hectares), 22.63 per cent under forest (36.88 lakh hectares), 8.87 per cent under current fallow lands (14.46 lakh hectares), 12.63 per cent under land put non-agricultural uses (20.58 lakh hectares), 8.25 per cent under barren and uncultivated land (13.45 lakh hectares) and remaining 8.27 per cent is under other fallow land, cultivable waste lands like permanent pastures and other grazing lands (13.48 lakh hectares) and land under miscellaneous tree crops and groves are not included in the net area sown which is around 2.23 per cent (3.63 lakh hectares).

As per the Third Advance Estimates for the year 2019-20, the area and production of food grains are estimated to show an increase in comparison with the previous year achievements viz, 2018-19. While the area under food grains is estimated 40.91 lakh hectares in 2019-20 compared to 40.23 lakh hectares in 2018-19, an increase of 1.69%, the production of food grains in 2019-20 is estimated at 171.37 lakh tones as compared to 149.56 lakh tonnes in 2018-19, an increase of 14.58 percent [1]. More than 60 percent of the rural workforce in Andhra Pradesh continues to be employed in agriculture-based livelihoods, despite the share of agriculture output being around 36.40 percent (at constant prices from 2011-12 to 2019-20 (AE)[2]. Poorer regions specially continue to have a greater share of the rural workforce primarily engaged in agriculture, either as cultivators or wage laborers [3]. The recurrent corona pandemic might aggravate the dependence on agriculture due to the migrant labour who are returning to their natives. The returning migrant labour could be landless, poor, small or marginal farmers.

They may be either unskilled or semi-skilled. It is very difficult for this returning migrant labour to find gainful employment in their natives. It becomes obligatory for majority of them to depend on agriculture and allied activities.[4]

## Scope for Agricultural Intensification

Cultivable area as percent of total geographical area is 37.08. The gap between the cultivable area and the sown area warrants agricultural Intensification in the state to meet the future demands of food both in terms of quantity and diversity in addition to providing gainful employment. State government schemes like YSR rythu bharosa (Including P.M. Kisan), Free crop insurance and Andhra Pradesh Crop Cultivators Right Act 2019" to provide all facilities including banking, insurance and other Govt. benefits to tenant farmers without effecting the rights of the owner of the land are the initiatives that offer huge scope for agricultural intensification.

Table-1 Land use classification of Andhra Pradesh (2017-18)

Classification	Area (in Lakh Ha.)	Percentage
Net area sown	60.43	37.08
Forest	36.88	22.63
Land put Non-agricultural uses	20.58	12.63
Barren and uncultivated land	13.45	8.25
Current fallow lands	14.51	8.91
Other fallow	9.37	5.75
Cultivable waste lands	4.11	2.52
Remaining land	3.64	2.23

Net sown area as percent of geographical area (37.08%) offers huge scope for agricultural intensification in Andhra Pradesh. Land put to non agricultural uses, current fallow lands, other fallow and cultivable waste lands together accounts for 48.57 lakh hectare.

Irrigation Projects taken up under Jalayagnam Programme are under progress and programmed to be completed on priority for providing irrigation to cultivable lands, drinking water and industrial water. Out of 54 Jalayagnam Irrigation Projects in the divided state of Andhra Pradesh, 14 Projects are completed and Phase I completed in 2 Projects. The other Jalayagnam Projects are also prioritized based on their progress, balance funds required and the benefits that will be accrued. Action plan is chalked out for completion of these projects in phased manner in the next 4 years [5]. The average ground water level for the state in March 2020 is 12.59 m., where as it was 15.24 m. during the same period in the previous year and observed a net rise of 2.65 m from the previous year water level. Net fall of 2.19 m. is observed from November 2019 average water level and 3.60 m. rise from May 2019 water level [6].

Agricultural intensification provides employment opportunities, prevents migration and could address the reverse migration in the aftermath of sustained covid-19 pandemic situation. However, bringing much out of 48.57 lakh hectares of current fallows, other fallows, land put to non-agricultural use and cultivable waste together in Andhra Pradesh into cultivation requires concerted efforts among agricultural, allied departments, agricultural research and extension wing of the Agricultural and allied universities in the state, irrigation, revenue and other related departments of the district administration. Besides preparing broad feasibility reports at the district level and prescribing the elements and components through top-down approach without sensitization and involvement of concerned grass root level functionaries may not serve the purpose. Agriculture being location specific governed by specific agro-socio-economic situation successful models and solutions elsewhere may not serve the purpose of bringing tangible changes. Hence a research study has been initiated to contemplate overall frame work involving technical, financial and administrative elements for agricultural intensification district wise and agro-climate wise in the state of Andhra Pradesh.

## Material and Methods

### State Government's novel Initiative

In this context, the recent contemplation and implementation of ward and village secretariats on October 2, 2019, as a significant step towards achieving the 'Gram Swaraj', the concept which Mahatma Gandhi had espoused [7]. The Chief Minister announced on May 30, 2019, that the ward and village secretariats were a part of the revolutionary changes conceived by his government, for strengthening the schemes and service delivery system at the grassroots level. This was a record of sorts in the country as no State government had undertaken such a massive recruitment drive. The ward and village secretariats had so far delivered crores of services to the people. Clear-cut guidelines and rules have been framed for the secretariats and a separate department has been created to have a focused approach to achieve the goals.

### Pre workshop training

Mandal Agricultural officers and Village agricultural Assistants will be given pre workshop training to coordinate the activities of agricultural intensification at village level. Village agricultural Assistant will be given an agricultural intensification kit which contains proforma for basic data collection, scaling up strategy [8] and questionnaires about the village along with existing agricultural infrastructure. Pre work shop training proposed would sensitize the Mandal Agricultural officers about the agricultural intensification activities to be carried out in their respective blocks besides equipping the Village agricultural Assistants about the capabilities to collect, collate, analyze and propose improvements in Agricultural and allied sectors necessary for sustainable intensification during the workshop

### Participatory rural appraisal (PRA)

Mandal Agricultural officers and Village agricultural Assistants will be exposed to the elements and modalities of PRA [9] to be conducted and coordinated at village level by the village agricultural assistants.

### PRA Team

Gram Panchayats in Andhra Pradesh comprises of the following 13 number of

functionaries. They are Panchayat Secretary, VRO, ANM, /MPHA (F), AH Asst, Fisheries Asst, Horti Asst, Agrl. Asst, Sericulture Asst, Mahila Police & W&CW, Asst/Ward Women & Weaker Sections Protection Secretary, Engineering Asst, Panchayat Secretary (Digital Asst), Village Surveyor, Welfare and Education Asst. Out of those functionalities that connected to Agricultural Intensification such as Panchayat Secretary, VRO, AH Asst, Fisheries Asst, Horti Asst, Agrl. Asst, Seri Asst, Engineering Asst, Panchayat Secretary (Digital Asst) and Village Surveyor will be involved during the transact walk along with important village men & woman to conduct the PRA. The documentation of the agricultural intensification kit will be articulated by the village agricultural assistant under the technical supervision of the mandal agricultural officer. The various features, data, qualitative remarks of the as Panchayat Secretary, VRO, AH Asst, Vil Fisheries Asst, Horti Asst, Village Seri Asst, Engineering Asst, Panchayat Secretary (Digital Asst) and Village Surveyor will be documented by the village agricultural assistant for onward discussion at the workshop series. Guidance of the crop scientists and other specialists like micro irrigation at University level will be taken to prepare the village level action plan, Mandal level strategic plan and District level vision document to achieve agricultural Intensification on a sustainable basis in long term.

### Agricultural Intensification Kit Elements

I Agro Economic Survey

II Scaling Up Proforma

III Questionnaire for Village Level Functionaries

### Work shop settings

District wise workshops could be convened with village level functionaries involved in the agricultural and allied sectors. Prepare action plans village wise and mandal wise during individual workshops for intensification of agriculture and allied sectors under the augmented irrigation scenario in Andhra Pradesh. Mandal wise crop/livestock and other allied components which can be intensified will be identified to achieve sustainable intensification in Andhra Pradesh. Finally, overall frame work involving technical, financial and administrative elements for agricultural intensification in Andhra Pradesh.

### Questionnaire For Village Level Functionaries

#### Panchayat Secretary

No. of able-bodied men and woman who are unemployed in the village

No. of able-bodied men and woman who are willing to work in agriculture in the village

Skills/training that can be imparted to attract them to Agriculture

Integration with existing schemes/Estimated additional investment

Obstacles

#### VRO

Govt and other lands that can be brought into cultivation

The best model for cultivation

FPO/Cooperative collective/cooperative tenant/ cooperative joint/ cooperative individual/other

Technical resources required

Obstacles

#### AH Assistant

Livestock/poultry/other units that can be introduced in the village

Requirement of no of units

Integration with existing schemes/Estimated additional investment

Technical resources required

Obstacles

#### Fisheries Assistant

Type of units that can be introduced in the village

Requirement of no of units

Integration with existing schemes/Estimated additional investment

Technical resources required  
Obstacles

#### **Horticulture Assistant**

Fruits/vegetable options in the village  
Facilities required to bring them into cultivation  
Integration with existing schemes/Estimated additional investment  
Technical resources required  
Obstacles

#### **Agriculture Assistant**

Crops/system options in the village  
Facilities required to bring them into cultivation  
Integration with existing schemes/Estimated additional investment  
Technical resources required  
Obstacles

#### **Sericulture Assistant**

Type of units that can be introduced in the village  
Requirement of no of units  
Integration with existing schemes/Estimated additional investment  
Technical resources required  
Obstacles

#### **Engineering Assistant**

Engineering infrastructure required for agricultural intensification in the village  
Lift  
Drip/sprinkler units  
Wells  
Others  
The additional area that can be brought into cultivation with the above infrastructure  
Integration with existing schemes/Estimated additional investment  
Technical resources required  
Obstacles

#### **Panchayat Secretary (Digital Asst)**

Information required for farmers in the village  
Investment required for the provision of the information  
Integration with existing schemes/Estimated additional investment  
Technical resources required  
Obstacles

#### **Village Surveyor**

Additional land available for agriculture in the village  
Facilities required to bring this additional area into cultivation  
Integration with existing schemes/Estimated additional investment  
Technical resources required  
Obstacles

#### **Results and Discussion**

The proposed pre-workshop training, data collection through PRA and questionnaires and the workshop series of functionaries like village agricultural assistants at mandal level to state level workshop involving agricultural and allied departments would result in the above outcomes

District wise and mandal wise Sensitization workshops and involvement of the staff of these village secretariats through a series of wok-shops with prior pre workshop shop training and consequent capacity building of these functionaries for conducting participatory rural appraisal, data collection followed by collation, analysis to develop decentralized village and mandal level action plans, strategy and vision documents at the district level. District wise Work shop series proposed during *pre kharif* and *kharif* seasons so as to implement the action plan for agricultural intensification from ensuing *Rabi* on a continuous basis with concerted

efforts involving agriculture, allied departments, irrigation, revenue, and other relevant departments starting from village to block to district level.

#### **Summary**

##### **Strategies for sustainable intensification in Andhra Pradesh**

More than 60 percent of the rural workforce in Andhra Pradesh continues to be employed in agriculture-based livelihoods, despite the share of agriculture output being around 36.40 percent (at constant prices from 2011-12 to 2019-20 (AE). Poorer regions specially continue to have a greater share of the rural workforce primarily engaged in agriculture, either as cultivators or wage laborers. Cultivable area as percent of total geographical area is 37.08. The gap between the cultivable area and the sown area warrants agricultural Intensification in the state to meet the future demands of food both in terms of quantity and diversity in addition to providing gainful employment. Net sown area as percent of geographical area (37.08%) offers huge scope for agricultural intensification in Andhra Pradesh. Land put to non-agricultural uses, current fallow lands, other fallow and cultivable waste lands together accounts for 48.57 lakh hectare. State government schemes like YSR rythu bharosa (Including P.M. Kisan), Free crop insurance and Andhra Pradesh Crop Cultivators Right Act 2019 [10] to provide all facilities including banking, insurance and other Govt. benefits to tenant farmers without effecting the rights of the owner of the land along with the recent contemplation and implementation of ward and village secretariats are the initiatives that offer huge scope for agricultural intensification. Agricultural intensification provides employment opportunities, prevents migration and could address the reverse migration in the aftermath of sustained covid-19 pandemic situation. This paper proposed framework for concerted efforts of village secretariat functionaries, a novel initiative of Government of Andhra where in elements like pre work shop training, capacity building to conduct PRA/RRA for data base creation through Agricultural Intensification Kit including Agro Economic Survey, Scaling Up Proforma and Questionnaire For Village Level Functionaries and finally brainstorming through a series of district wise and mandal wise work shops were discussed to herald ever green revolution in Andhra Pradesh.

#### **Conclusion**

Encouraging 48570 aspiring entrepreneurs or farmers groups or FPO's across 13 districts with ANGRAU as technology partner, Agriculture department as implementation agency, with a grant of 4857 crores investment mobilized through state government with interest subvention assistance from NABARD with the objective to intensify Andhra Pradesh.

District wise and mandal wise Sensitization workshops and involvement of the staff of these village secretariats through a series of wok-shops with prior pre workshop shop training and consequent capacity building of these functionaries for conducting participatory rural appraisal, data collection followed by collation, analysis to develop decentralized village and mandal level action plans, strategy and vision documents at the district level.

**Application of research:** Study of framework for concerted efforts of village secretariat functionaries

**Research Category:** Agricultural Intensification

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**Ethical approval:** This article does not contain any studies with human participants or animals performed by any of the authors.

Ethical Committee Approval Number: Nil

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