

# Dynamics of Agrarian Changes in VDSA Villages in Gujarat

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## Introduction

- Gujarat's (GJ) agriculture sector grew at 11 % annual growth rate of last decade
- Cotton, wheat and milk are the major commodities of the state.

## Objectives

- To analyze extent of changes on agrarian performances in VDSA villages in Gujarat over the last 5 years.

## Methodology and data

- Trend on key agrarian variables over the last 5 years of VDSA survey (2009-2013) were derived
- Data compiled from quantitative and qualitative survey
- VDSA villages are Babrol, Chatha in Panchmahal (Tribal) district and Karmadichingariya and Makhiyala villages are in agriculturally developed Junagadh district.

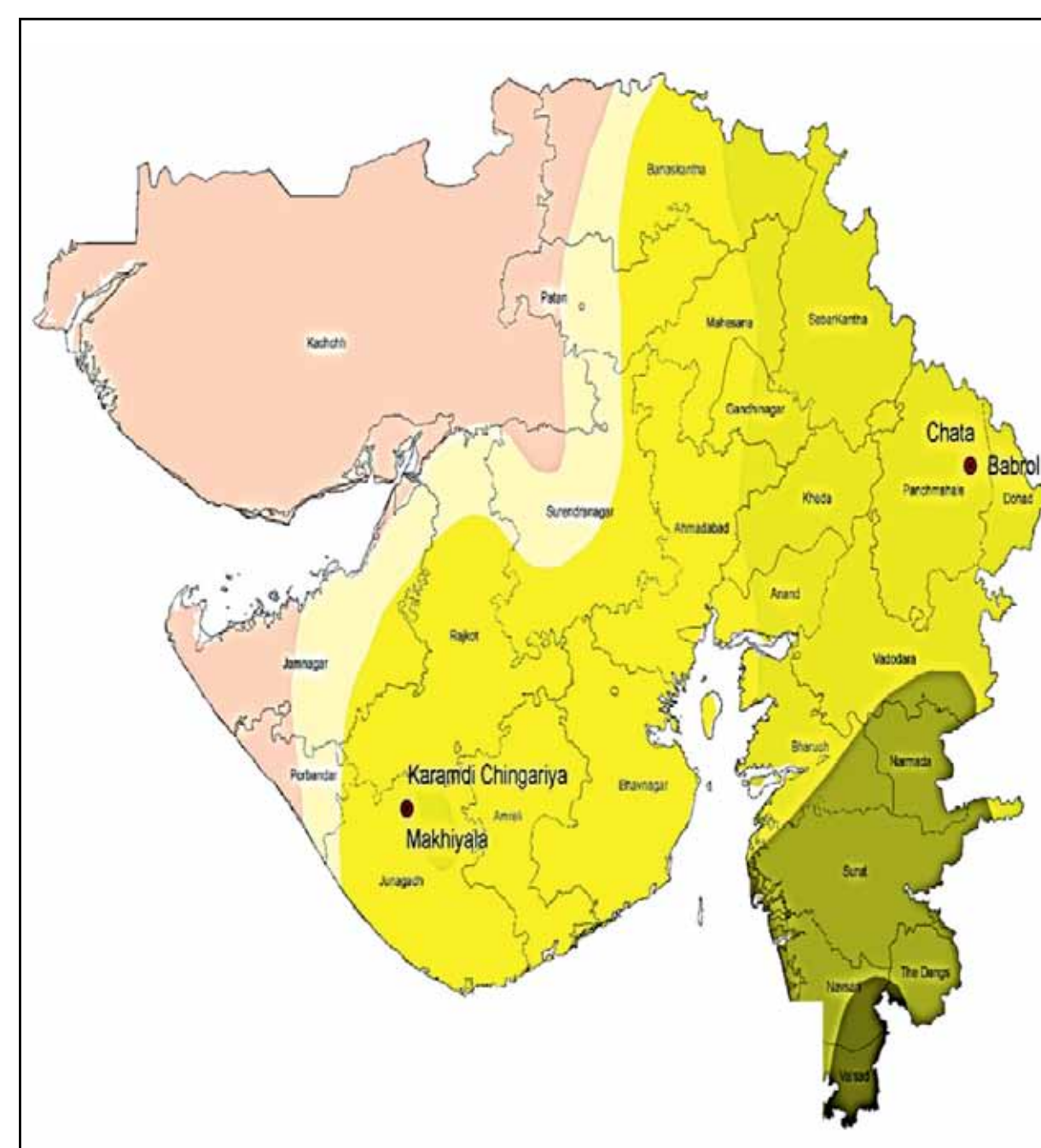


Fig.1 Gujarat map showing VDSA villages.



Harvested Maize crop in Chatha (tribal) village of Panchmahal.



Groundnut crop in Karmadichingariya village of Junagadh.

## Results and discussion

### Cropping Pattern

- Area under groundnut has decreased in Junagadh substantially. Groundnut has been replaced by cotton (Fig. 2)
- Rainy (Kharif) season fallow is in increasing trend in Junagadh villages
- Maize and paddy are two important staple food crops of tribal villages.

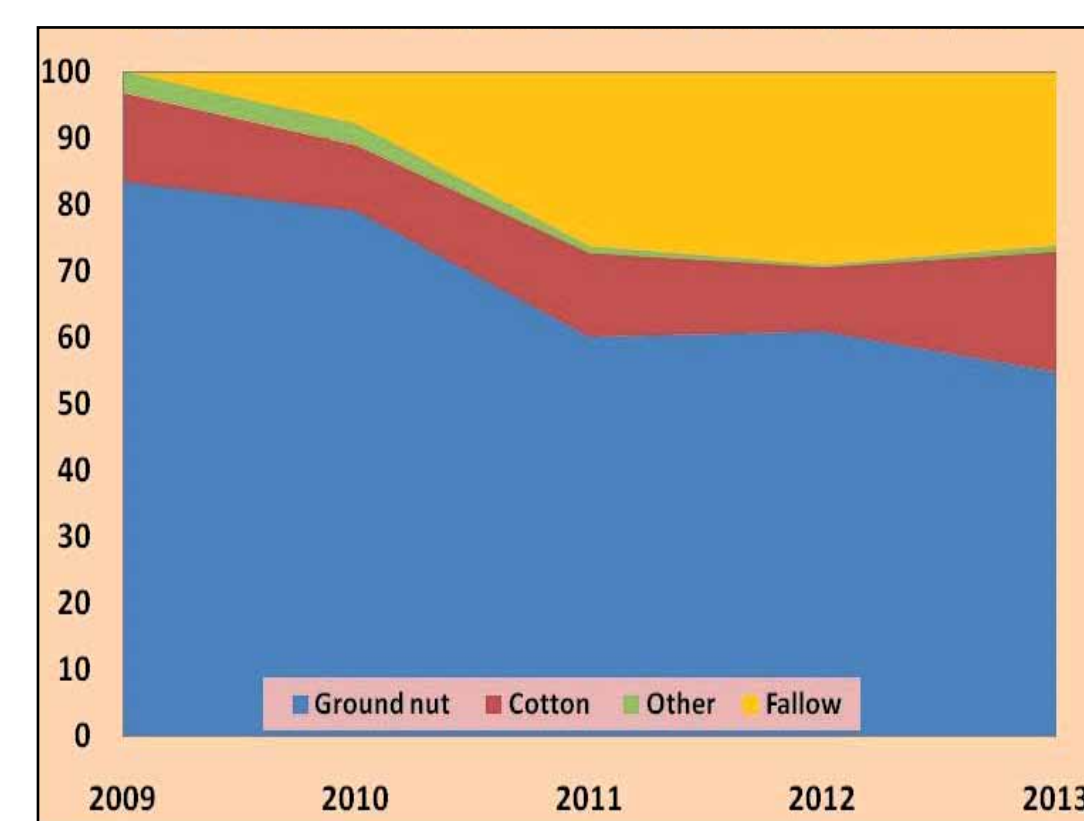


Fig. 2 Cropping pattern of rainy (Kharif) season (%) in Junagadh villages.

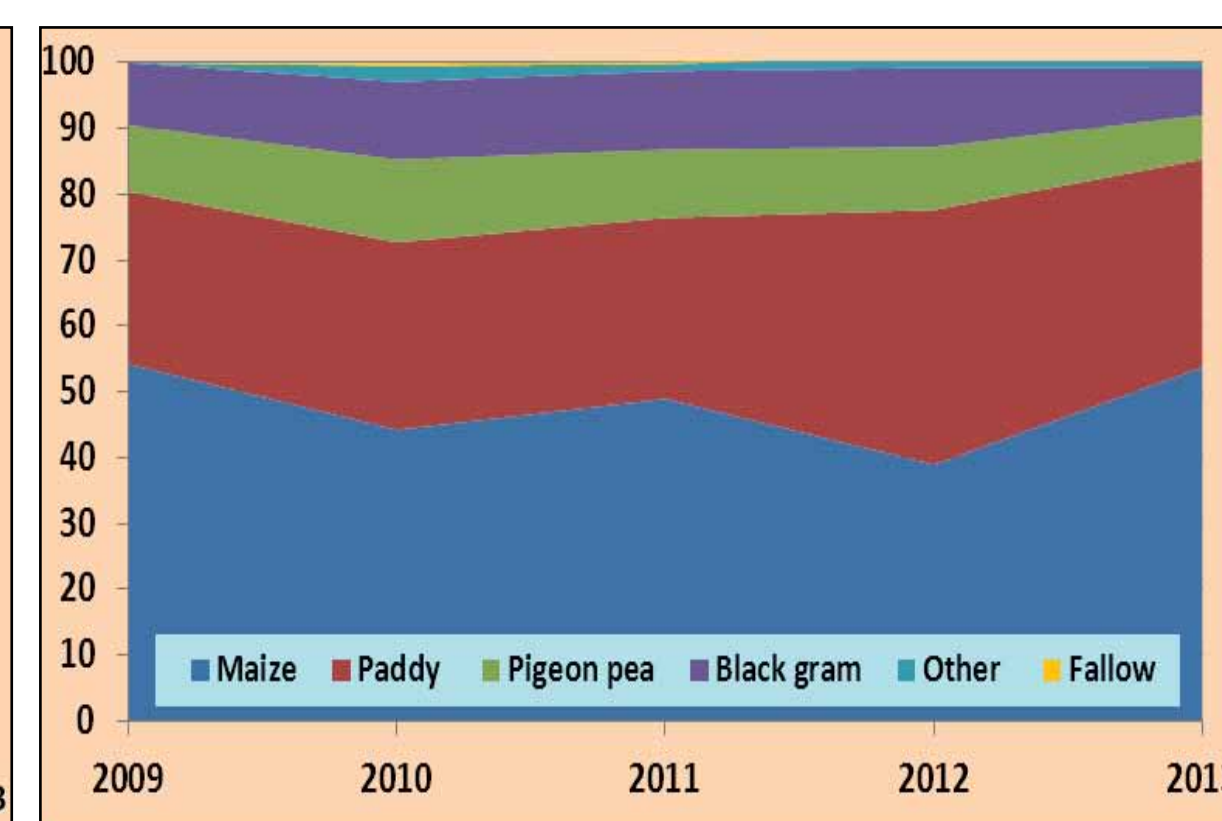


Fig.3 Cropping pattern of rainy season (%) in Tribal villages.

### Crop Productivity

- Crop productivity of small farmer has increased more in Junagadh villages than tribal (Fig. 4)
- The crop productivity (profitability) of small farmer is more than medium and large farmers
- In the tribal villages, even the labor households have got some land (0.20 acre), as a social safety nets to deal with fluctuation in income (Fig. 5).

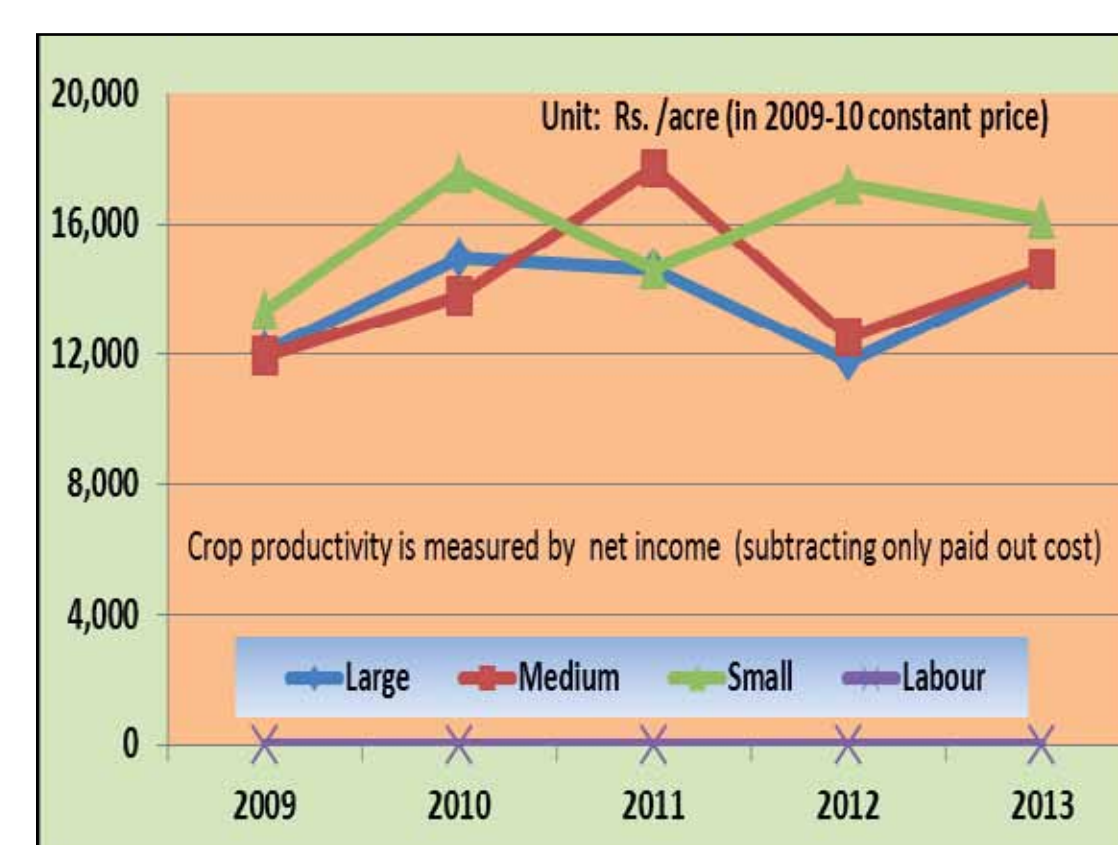


Fig. 4. Crop productivity per acre in two villages of Junagadh by farm size.

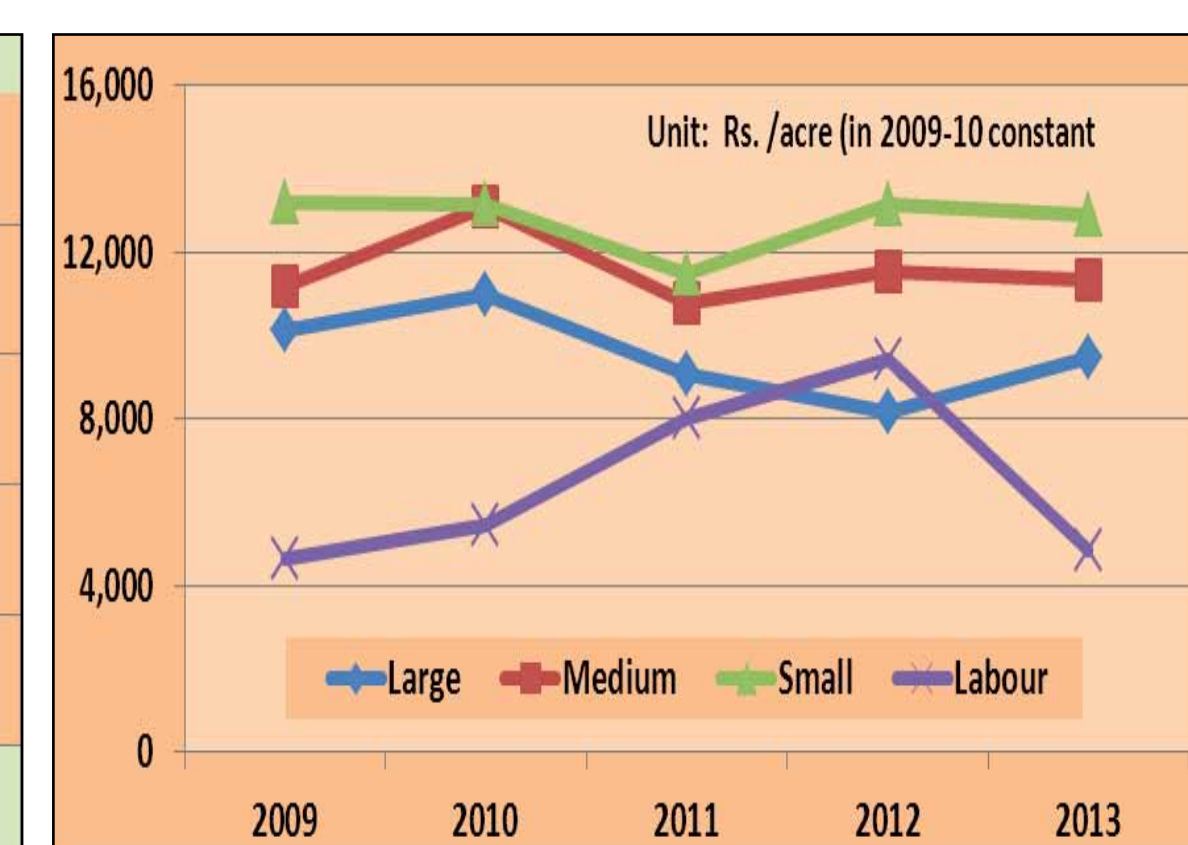


Fig. 5. Crop productivity per acre in two villages of Panchmahal (Tribal) by farm size.

## Trend on Agricultural wage rate

- The seasonal migration of rural labor to non-farm work (construction) is very high in Gujarat
- Differences on agriculture wage rate between male and female are smaller in Gujarat (Fig. 6 and 7).

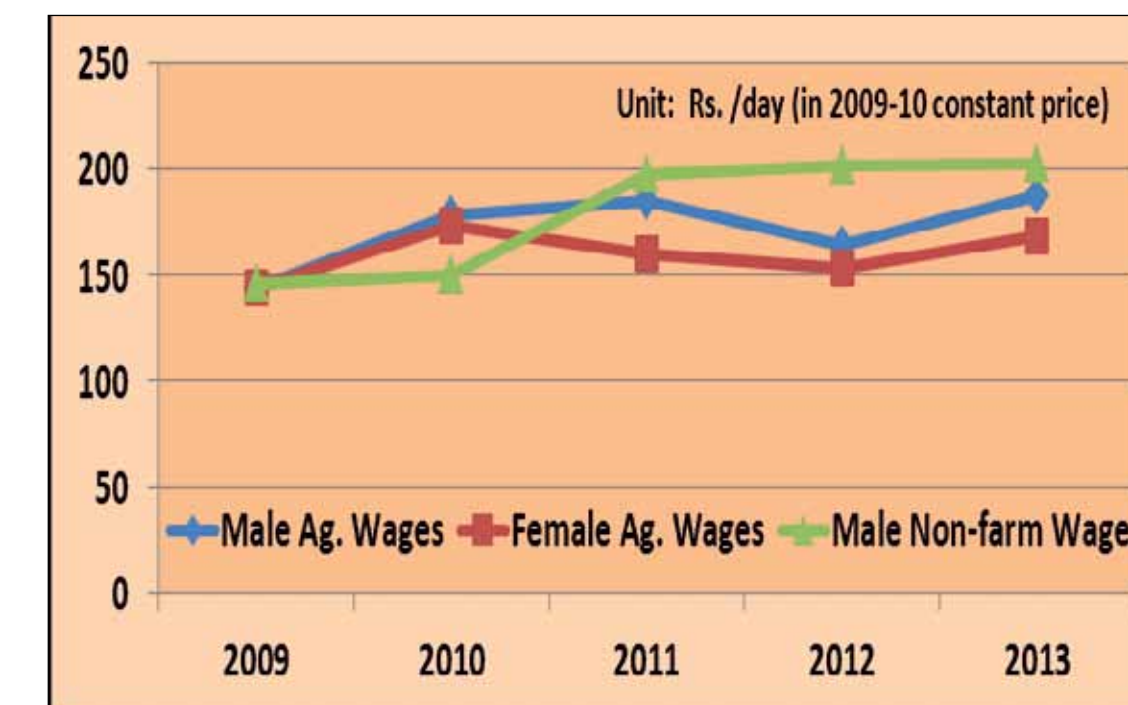


Fig. 6. Average farm and non-farm wages in Junagadh villages.

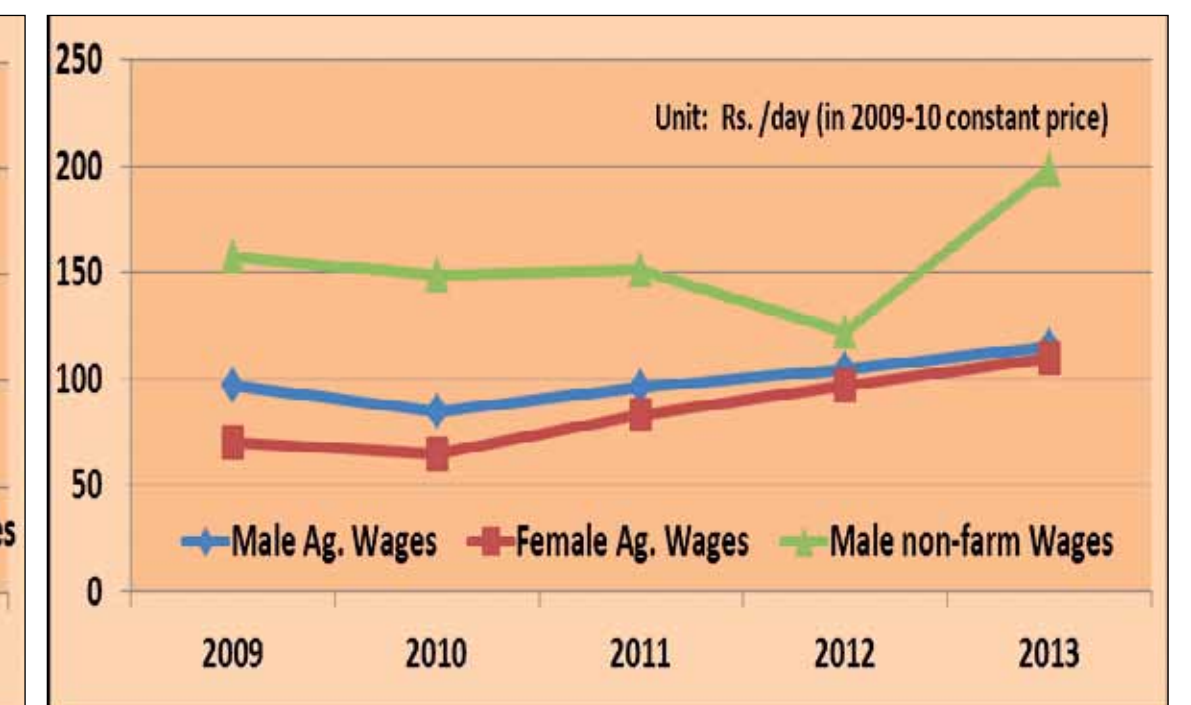


Fig. 7. Average farm and non-farm wages in tribal villages.

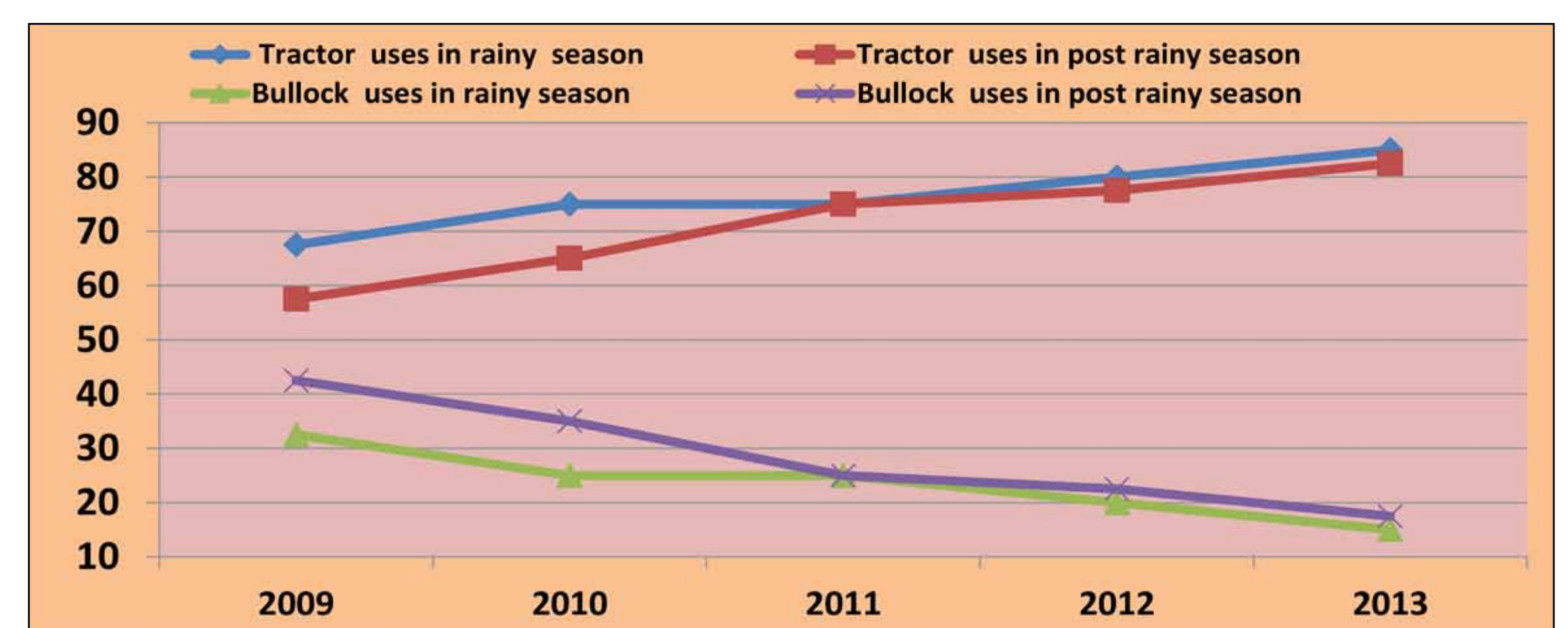


Fig. 8. Trend of tractor vs. bullocks uses (%) in Panchmahal (Tribal) villages of Gujarat. Source: FGD.

## Increasing use of tractor

- Machinery use has facilitated fast pace of agriculture transformation in Gujarat.

## Income sources

- Livestock income is a major sources of livelihood in tribal than agriculturally developed villages (Fig. 9)
- Non-farm income of all farm size groups has increased substantially except large and medium farmers in Junagadh (Fig. 10).

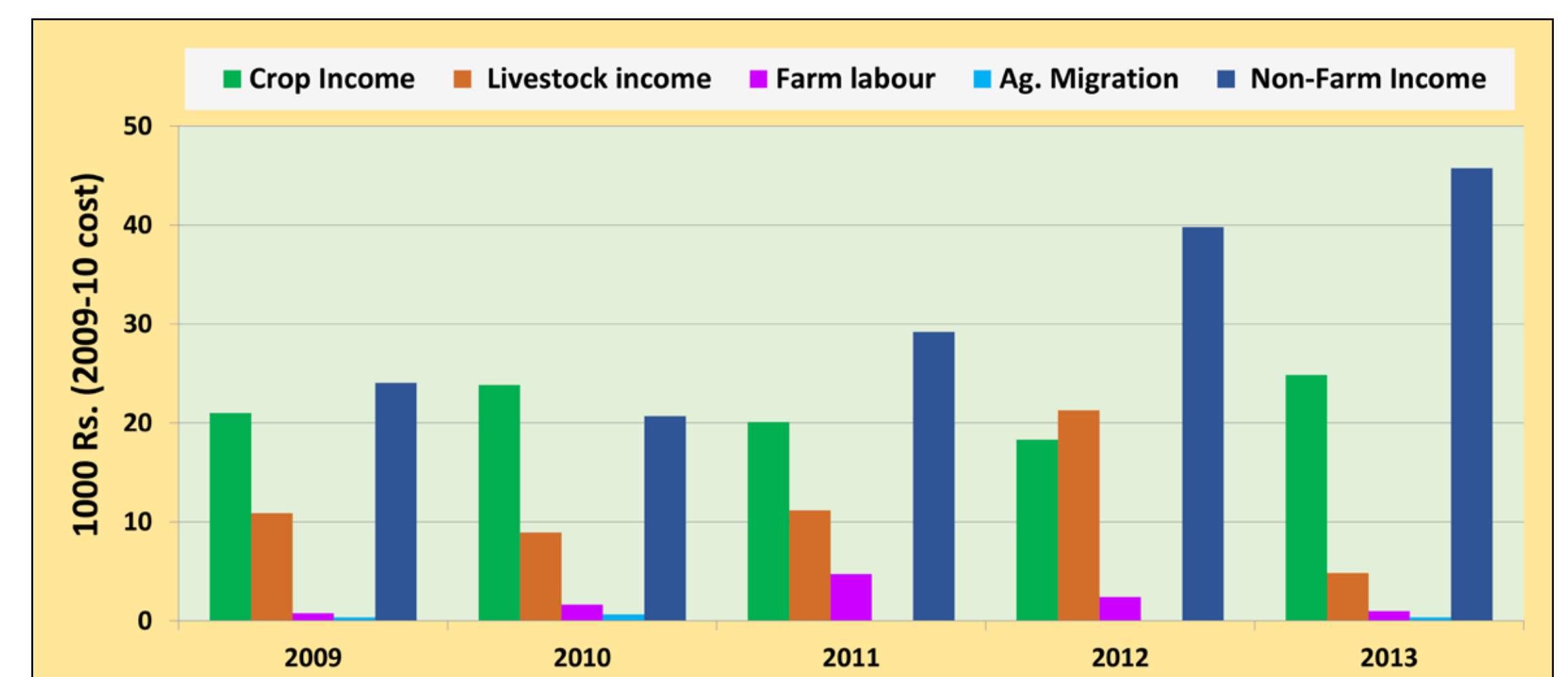


Fig.9 Household income of large and medium farmers in tribal villages

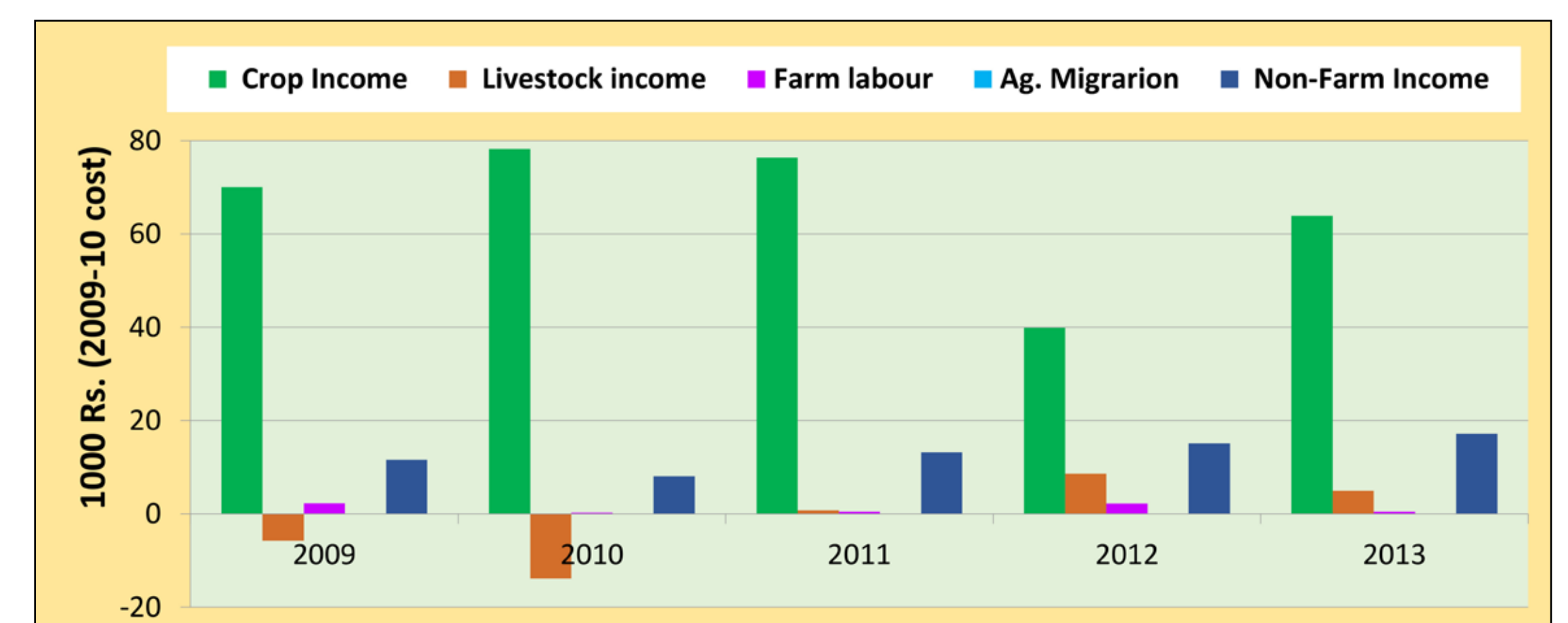


Fig.10 Household income of large and medium farmers in Junagadh villages.

## Conclusions

- Within short period, cropping patterns have shifted drastically in Junagadh villages than in tribal villages
- Overall, crop productivity of tribal villages is 2/3rd of the agriculturally developed district
- Tribal villages have followed diversified pathways as coping mechanism whereas agriculturally developed villages has followed intensive pathways of development.