

# IMPACT OF LAND ACQUISITION AND POOLING ON INCOME OF AFFECTED HOUSEHOLDS IN NEW CAPITAL REGION OF ANDHRA PRADESH

**Shailaja T**

Research Scholar, Department of Agricultural Economics, Agricultural College, Bapatla

**Uma Devi K**

Assistant Professor, Department of Agricultural Economics, Agricultural College, Bapatla

*This research paper is drawn from the Msc thesis titled “Impact of Land Pooling and Acquisition for New Capital Region Development on Rural Livelihoods in Guntur District of Andhra Pradesh” submitted to ANGRAU, Ag. College, Bapatla in 2016*

## ABSTRACT

*In a growing economy like India, land acquisition for the ongoing developmental projects is inevitable. The compulsory acquisition of land causes large scale displacement of people, especially the farmers who lose their land and thus their livelihood, as three-fourth of the country's population lives in countryside and agriculture is their only livelihood option. Ananth (2015) stated that the impact of the new capital building efforts on livelihoods is difficult to estimate. While large number of landowners have benefitted immensely due to the sharp rise in land prices but the governments' lease offer, for tenant farmers and segments of landless labourers was very less. The entrepreneurial members of capital villages have gained substantially. This paper highlights about the impact of land acquisition and pooling on income of affected sample households.*

**KEY WORDS:** *Impact, income, land acquisition.*

## INTRODUCTION

The concept of land pooling is based on The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Amendment) Bill, 2015 that was introduced in Lok Sabha on February 24, 2015. Pooling of privately held land parcels by a public agency is variously known as land pooling and reconstitution (LPR). The land value gain for owner far exceeds the money value of the unserved land given to the public agency in rapidly urbanizing areas. LPR is considered one of the viable solutions that “unlocks land for urban use in a politically acceptable manner (Mathur, 2013). The broad objective of LPS is to do justice to affected families by the construction of a livable and sustainable capital city for the state of A.P. by making the land owners and local residents as partners in development. Land acquisition is fundamentally coercive. When a state notifies farmers that it seeks to acquire their land, “the potential use of violence backs this intent.” If the farmers refuse to

vacate their land, the threat of coercion becomes actual violence (Levien, 2015).

By naming the new capital as Amaravathi, the A.P. chief minister, N. Chandra Babu Naidu, propped up the pride of Andhra, who have been hurt with the loss of Hyderabad, after bifurcation. The government of A.P was bifurcated into separate Telangana and the residual A.P with the effect from 2 June, 2014. Post bifurcation of Telangana and A.P. in 2014, decided to locate a new capital, named Amaravathi, the “Peoples' capital”, in an area spread over 25 villages and four hamlets in Thullur, Tadepalli and Mangalagirimandals of Guntur District, on the right bank of the Krishna River. The state government entered into an agreement with International Enterprise, Singapore to prepare a master plan and develop a “world class capital city” thus becoming the “first outsourced capital city” in India. (Rajappa, 2015).

The villages marked for the capital region include both irrigated and dry lands with complete linkages from farm to market and large sections of people deriving livelihoods

including landowners, share croppers, tenants and agricultural workers earning secure livelihood from agriculture. Drastic urbanization of these areas due to land pooling policy may adversely impact food security of these areas and state as well. Parcels of land in these capital city areas, which had no buyers for 8 lakhs per acre the same time last year, now command a price of 80 lakhs to 1 crore per acre. On the highways and in places within a radius of 25 kilometers from Vijayawada city limits, it is impossible to find land priced less than 1.5 to 2 crores per acre – even for lands with forged documents. One year back, people would have an opportunity to sell some of the land in more distant parts (20-25 kilometers from Vijayawada) at 50 lakhs. Even in places that are 5-8 kilometers beyond the city limits land is now being sold at not less than 4 crores per acre (Ananth, 2014).

### OBJECTIVES

- To study the impact of land acquisition and land pooling on income of rural livelihood

### MATERIAL AND METHODS

Guntur district of AP was purposively selected for the research study because capital formation is mainly concentrated in the Thullur mandal of Guntur district. A number of 8 owners, 8 tenants, 4 agricultural labourers were selected randomly from each village of top six villages having highest area under land pooling and land acquisition,

constituting a sample of 48 owners, 48 tenants, 24 agricultural labour and total of 120 affected households. Primary data on various aspects like reasons for land acquisition, income particulars were collected from affected households for the agricultural years 2014-15 and value of land surrendered to government and compensation particulars during 2015-16 through field survey by the interview and recall memory method with the help of a pre-tested and well-structured schedule. It includes details like family size, education, land holding details, asset position, input use, costs and returns, reasons to surrender land for acquisition, compensation offered and received etc. The secondary data like population of villages in mandals, no. of owned and tenant farmers, agricultural labours, total land under pooling and acquisition etc. was obtained from various sources like mandal offices, CRDA office, AP government official websites and CRDA website.

### RESULT

#### IMPACT ANALYSIS OF LAND ACQUISITION AND POOLING ON RURAL LIVELIHOODS

To study the impact of land acquisition on income of households, it is important to know whether previous and present incomes are similar or not. Paired t- test was performed to test the null hypothesis that previous and present incomes are same.

**Table 1. Paired t – test for Impact Analysis:**

	N	Mean	SD	95 % C.I		t value	Sig (2 tail)
				Lower limit	Upper limit		
Previous Income	120	212000	266756.2	-220001.5	-57590.3	-3.384***	0.001
Present Income	120	350000	423545.1				

\*\*\*Denotes significance at 1 per cent LOS

By observing the mean values, it can be understood that, there is increase in mean values of income of households by Rs 1,38,000 and t value found to be significant at 1 per cent

level. This shows that there is significant increase in household income after land acquisition (table 1).

**Table 2. Impact on percent change in incomes of owners (N= 48)**

Particulars	b <sub>i</sub> values	Standard Error
Owner	56.392**	49.567
Per cent of family members in cultivation	0.283**	1.201
Per cent of family members in labour	-1.831	2.296
Per cent of family members in business	0.343	1.093
Land type	148.994**	56.610
Area of land surrendered	1.128**	3.334
R <sup>2</sup> = 0.317, Constant = 2.917		

\*\*Indicates significance at 5 % LOS

The overall model fitted well with R<sup>2</sup> of 0.317, indicating 31.7 per cent variation in percentage of income change would be explained by the explanatory variables.

To analyze the impact of land acquisition/ pooling on incomes of owners, percentage change in income before and after land acquisition was taken as dependent variable and variables of owners, percentage of family members in cultivation, percentage of family members in business and percentage of family members in labour, land type and area of land surrendered were taken as explanatory variables. Out of

them owner and land type were the dummy variables.

Variables of owners, percentage of family members in cultivation, land type and area of land surrendered, showed positive and significant impact on per cent change income at 5 percent level of significance.

Intercept explains percent change in income of household of owner cum tenant who surrendered dry land. Average percent change in income of owner cum tenant who surrendered dry land is about 2.917 that of owners is higher about 56.392.

Variable owner showed positive and significant influence on percent change in income of households indicating that the given compensation was satisfactory and adequate for them and there was positive impact on their income levels.

Percentage of family members in cultivation also had a positive impact on percentage change in income. That is the increase in family members in cultivation, the income and the compensation also increased.

With one percent increase in family members in cultivation, there will be 0.283 per cent increase in income levels due to land acquisition. With one unit increase in cultivated land, the percentage change in income will be increased by 1.128.

Variables land type and area of land given also had positive significant influence. Income from irrigated land was more and compensation offered for irrigated farmers was more compared to the dry land farmers. Compensation was offered

to the owned farmers based on the extent and type of land. Hence both the variables showed positive and significant impact on incomes of owned farmers.

### Impact on percent change in incomes of tenants (N= 48)

This model was analyzed using a sample of 48 tenants, comprising 42 tenants and 6 tenant cum agricultural labour.

Multiple Linear Regression was used to determine the impact of land acquisition on per cent change in incomes of tenants. For this, percentage change in income was taken as dependent variable and variables of tenant, tenant cum agricultural labour, per cent of family members in cultivation, per cent of family members in labour, per cent of family members in business, land type and area of leased in land were taken as explanatory variables in which tenant, tenant cum agricultural labour and land type were dummy variables and regression was fitted using SPSS 16.0. Results obtained were depicted in the table 3.

**Table 3. Impact on percent change in incomes of tenants (N= 48)**

Particulars	$b_i$ values	Standard Error
Tenant	-7.838**	5.562
Tenant + agricultural labour	0.79	0.033
Agricultural Labour	0.22	0.133
Per cent of family members in cultivation	-0.353	0.066
Per cent of family members in labour	-3.012	1.086
Per cent of family members in business	0.558**	0.354
Land type	-0.538**	1.448
Area of land leased in	-1.916**	0.178
R <sup>2</sup> = 0.817, constant = -65.833		

\*\*Significant at 5 per cent level

The overall model fitted well with R<sup>2</sup> of 0.817, indicating 81.7 per cent variation in percentage of income change would be explained by the explanatory variables.

Intercept explains percent change in income of household of owner cum tenant who surrendered dry land. Average percent change in incomes of owner cum tenants who surrendered dry land is about 65.833, that of tenants lower by about 7.838 and that of tenant cum agricultural labour and agricultural labour is higher by about 0.79 and 0.22 respectively.

Per cent of family members in business showed a positive impact while tenant, land type and area of leased in land showed negative impact and found to be significant at 5 per cent level of significance.

Before land acquisition, tenants used to cultivate multiple crops and earn more than enough to sustain their families. A.P. land pooling model compensated tenants with a meager

amount of Rs. 2500 per month and hence tenant variable showed negative influence on income of households.

Per cent of family members in business had a positive impact on percentage change in income of tenants because they could sustain their families with the extra income from their family business though they could not get better deal in LPS.

Variables Land type and area of land leased in had a negative impact on incomes of tenant farmers because, income from irrigated land would be more than that from dry land and accordingly they pay more rent to irrigated land. Rental value also increases as the area of leased in land increases. Thus both the variables showed negative influence with respect to percentage change in incomes of affected tenant farmers. With one unit increase in leased in land the percentage change in incomes of tenants would decline by 1.916.

**Table 4. Impact on percent change in incomes of agricultural labour(N= 30)**

This model was analyzed using a sample of 24 agricultural labour and 6 labour cum tenants

Particulars	$b_i$ values	Standard Error
Percentage of income from other sources	-0.160**	0.065
Whether unacquired village is present near acquired village	-1.586**	0.736
Nearness of working area to CRDA work site	-0.110	0.322
Area of land cultivated before acquisition/pooling	-0.602**	0.181
Percentage of family members in labour	-0.009	0.08
R <sup>2</sup> = 0.928, constant = -68.96		

\*\*Indicates at 5 per cent level of significance

The overall model fitted well with  $R^2$  of 0.928, indicating 92.8 per cent variation in percentage of income change would be explained by the explanatory variables.

Intercept explains percent change in income of household of agricultural labour whose village is neither present near to acquired village nor their working area is near to CRDA worksite is about 68.96 per cent.

For assessing the impact of land acquisition/pooling on incomes of agricultural labourers, percentage change in income was taken as dependent variable. Variables like percentage of income from other sources, whether any unacquired village present near their acquired village, Nearness of their working area to Capital Region Development Authority (CRDA) work site, area of land cultivated before acquisition/pooling and percentage of family members in labour were taken as explanatory variables. Out of them, whether any unacquired village is present near the acquired village, nearness of their working area to Capital Region Development Authority (CRDA) were the dummy variables. The model was solved using SPSS software and results obtained were given in table 10. Variables like percentage of income from other sources, whether any unacquired village is present near the acquired village? area of land cultivated before acquisition/pooling were negative and found to be significant at 5 per cent level.

**Table 5. Impact of land pooling/acquisition on change in incomes on overall sample (N = 120)**

Particulars	$b_i$ values	Standard Error
Owner	351.409**	46.883
Owner + Tenant	303.895**	54.855
Tenant + Agricultural labour	11.640	105.100
Agricultural Labour	-2.555	128.082
Per cent of family members in cultivation	-0.846	1.166
Per cent of family members in labour	-0.946	1.592
Per cent of family members in business	0.433	1.356
Education of head of the household	-38.086	40.098
Land type	-86.385**	48.735
$R^2 = 0.482$ , constant = -54.088		

\*\*Indicates significance at 5% per cent LOS

The overall model fitted well with  $R^2$  of 0.482, indicating 48.2 per cent variation in percentage of income change would be explained by the explanatory variables.

Out of the five categories of households, tenant category was chosen as the base category and hence showing four household dummy variables, owner, owner cum tenant, tenant cum agricultural labour and agricultural labour in the model.

Variables representing owners and owners cum tenants were positive and significant at 5 per cent level indicating that owners had a positive impact on income with respect to land acquisition/pooling. This might be due to the money compensation and the allotment of residential and commercial plots after 10 years which will have huge monetary value in future.

Owners and tenant farmers whose land was irrigated were more affected than dry land farmers. This variable whether land given is irrigated showing negative influence on the income of households, though package was more in case of irrigated lands. However, there would be overall negative impact as the state would be losing fertile agricultural lands

Labour income was more before land acquisition because both male and female workers used to work in the field earning Rs 250 – 300 per head per day. But due to land acquisition, they had no agricultural labour income and only one (male) of the family members allowed to work in the construction area of New Capital Region. Hence agricultural labours were badly affected by land acquisition having left with no other source of income to survive.

Presence of unacquired village near to acquired village had also shown negative significance because agricultural labourers have to search for unacquired villages for doing daily labour, but in unacquired villages also, there would be labourers from same village which the owners may prefer rather than labourers from other villages. So if a labour from acquired village would like to work in other village, one has to work for minimum wages which may have a negative impact on their incomes.

Area of land cultivated before acquisition/pooling was also negatively significant, indicating that labour cum tenants who cultivated the land before acquisition were also affected badly as they could not continue cropping and had to forego their agricultural income. With one unit increase in income from other sources, the percentage change in incomes of agricultural labour would decline by 0.16.

and the farmers would be losing their source of livelihood. With one unit increase in income of owners and owner cum tenants, the percentage change in income of overall affected sample would increase by 351.40 and 303.89 units respectively.

Similar Impact study on incomes was done by Ghatak *et al.*, 2012, in which percent change in total income was dependent variable. Explanatory variables like affected owner cultivator, affected mixed tenants showed positive significance, while variables like unaffected agricultural labour and proportion of land acquired showed negative significance.

## SUGGESTIONS

- Tenants and agricultural labours must be given proper compensation like that of owned farmers which would be benefitting them in long term.
- Alternative agricultural land should be provided to facilitate cultivation for tenant farmers.
- Immediate employment should be provided for agricultural labours so that they don't lose their income and livelihoods.

**CONCLUSION**

Per cent change in income of owners due to land acquisition was positively influenced by variables like owners, per cent of family members in cultivation, land type and area of land surrendered at 5 per cent level of significance. Per cent change in incomes of tenants was positively influenced by percentage of family members in business. Percentage change in income of agricultural labour was negatively influenced by variables like percentage of income from other sources, whether unacquired village is present near acquired village, area of land cultivated by tenant cum agricultural labour before acquisition/ pooling and percentage of family members in labour and they were significant at 5 per cent level of significance. Percentage change in income on overall sample was positively influenced by variables like owner, owner cum tenant and negatively influenced by land type at 5 per cent level of significance. Percentage change in assets value on overall sample was positively influenced by wealth gain, total compensation received as on February, 2016.

**REFERENCES**

- 1) Ananth,S. (2015), "Speculation and the New Capital – Andhra Pradesh Capital Development Story". *Economic and Political weekly*. 50, p.p: 45.
- 2) Ananth,S. (2014), "The Real Estate of bifurcation". *Economic and Political weekly*. 49, p.p: 26- 27).
- 3) Ghatak, M., Mitra, S., Mookherjee, D., Nath, A. (2012), "Land acquisition and Compensation in Singur: What really happened?" [www.bu.edu/econ/files/2010/05/Singurmarch29-2012.pdf](http://www.bu.edu/econ/files/2010/05/Singurmarch29-2012.pdf)
- 4) Levien, M. (2015), "From Primitive Accumulation to Regimes of Dispossession. Six theses on India's Land Question". *Economic and Political Weekly*. 30 May, 50 (22): p.p: 146 – 157.
- 5) Mathur, S. (2013), "Use of Land Pooling and Reconstitution for Urban Development: Experiences from Gujarat, India". *Habitat International*. 38: p.p: 199 – 206.
- 6) Rajappa, S. (2015). *Thus capital*. Statesman. 2 june.
- 7) <http://guntur.nic.in/reports/lps/lpssta.pdf>
- 8) <http://www.crda.ap.gov.in/APCRDA/userinterface/loginform.aspx>
- 9) <http://www.amravati.nic.in/htmldocs/LAO.html>