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Impact of ground-water marketing on cropping pattern of buyers

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Abstract

The present investigation entitled “Impact of ground-water marketing on cropping pattern of Buyers.” was carried out at Durg district of Chhattisgarh, during 2017-18. The study was conducted in Durg and Dhamdha blocks in Durg. 30 farmers were selected for the study. The study was based on both primary as well as secondary data. The scheduled caste, scheduled tribes, other backward caste and general caste consists 10.01 percent, 23.33 percent, 46.66 percent, and 20 percent, respectively of the total sampled farmers. There was no impact of water marketing on cropping pattern in kharif season because buyers do not purchase water in kharif season, but during Rabi season the impact was seen as the buyers were purchasing water. After water marketing, high priced crops such as gram, tomato, and cauliflower was taken by buyers. Due to this reason, the cropping intensity was also increased up to 186 percent at these farms which were otherwise 139.5 percent.

Keywords: Ground-water, buyers, net cropped area, ham

Introduction

Ground-water markets have been considered as a coping strategy for managing water scarcity and reallocation of water from surplus to scarcity regions/localities/farms. Evidences show that the ground-water markets play a significant role in India's ground-water economy. Ground-water markets help their owners to improve the economic viability of their lifts and thereby enhance their incomes. In Chhattisgarh region where canal is the only source of irrigation in the Kharif season. In the Rabi season, this source is completely unable to supply the irrigation water to the farmers' fields. Except few tube well owners, most of the farmers in Chhattisgarh are only dependent on paddy crop and left fellow their fields in the Rabi season due to lack of irrigation water.

Materials and Methods

A multi-stage sampling design was adopted for the ultimate selection of respondents. Sample respondents were farmers. Durg district was selected purposively for study because district Durg accounted for the highest area under ground-water irrigation in the state. In Durg district Net ground water availability is 82012.89 ham (hectare meter) and existing gross ground water draft for Irrigation purpose is 48856.10 ham which is highest among all districts of Chhattisgarh state. The study was based on both primary as well as secondary data. The method of enquiry was conducted by survey method and collection of information was based on primary and secondary information. Secondary data was collected from the published data and primary data was collected through pretested questionnaire for year 2016-17. Looking to the data simple average percentage statistical tools were applied for the fulfilment of the objectives.

Result and Discussion

The impact of ground-water marketing on cropping pattern and cropping intensity of buyers (before and after ground-water marketing) is presented in table.

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Table 1: The impact of ground water markets on cropping pattern and cropping intensity of buyers

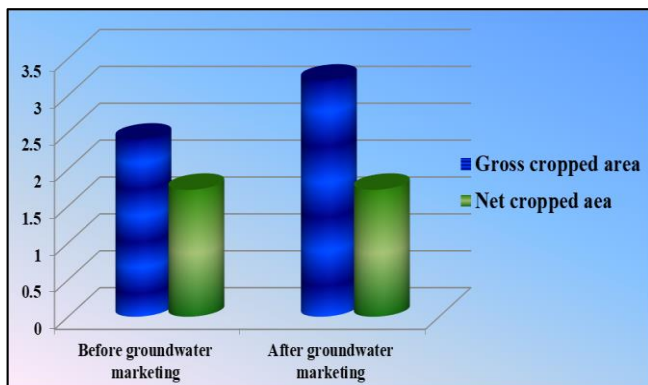
| Before Ground-water marketing | | After Ground-water marketing | |
|-------------------------------|-----------|------------------------------|-----------|
| Kharif | | | |
| Crop | Area (ha) | Crop | Area (ha) |
| Paddy | 1.72 | Paddy | 1.72 |
| Soybean | - | Soybean | - |
| Tomato | - | Tomato | - |
| Total land | 1.72 | Total land | 1.72 |
| Rabi | | | |
| Lathyrus | 0.68 | Gram | 0.71 |
| | | Tomato | 0.69 |
| | | Cauliflower | 0.08 |
| Total land | 0.68 | Total land | 1.48 |
| Gross cropped Area | 2.40 | | 3.2 |
| Net cropped area | 1.72 | | 1.72 |
| Cropping intensity | 139.5% | | 186.0% |

Though the impact of water marketing on cropping pattern was not at all in kharif season because buyers do not purchase water in kharif season, but noticeable change in Rabi season may be seen in Table. In the above table the changes in cropping pattern as well in cropping intensity is shown. As evident from the table more area of cultivable land was put under the Rabi cultivation by the water buyers which was quite impossible in the absence of assurance for irrigation by sellers through ground-water marketing. After availing this facility, high priced crops such as gram, tomato and cauliflower was taken by buyers on their fields. Due to this reason, the cropping intensity was also increased up to 186 percent at these farms which were otherwise 139.5 percent.

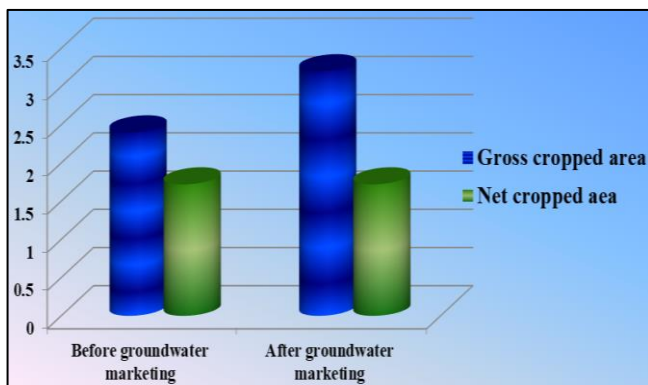
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References

1. Anonymous. Agricultural Year Table. Commissioner of Land Revenue Raipur, Chhattisgarh; c2010-2016. p. 54-64.
2. Anonymous. FAO, Statistical Year Book. Europe and Central Asia Food and Agriculture, FAO, Rome, Italy; c2016. p. 133-162.
3. Gupta SP. Structure and conduct of water market in Raipur district of Madhya Pradesh, in: A micro level study. The Bihar Journal of Agricultural Marketing. 1995;3(2):177-184.
4. Kolavalli S, Chicoine DL. Ground-water Markets in Gujarat. Indian Institute of Management, Ahmadabad; c1986.
5. Shah T. Managing conjunctive water use in canal command: Lessons from the analysis of the Mahi Right Bank Canal, Gujarat, Research Paper No.3, Institute of Rural Management, Anand, India; c1988.



Impact of ground-water marketing on Gross cropped of Buyers



Impact of ground-water marketing on Cropping intensity if buyers

Conclusion

More area of cultivable land was put under the Rabi cultivation by the water buyers which was quite impossible in the absence of assurance for irrigation by sellers through