



Role of Agriculture in Tribal Economy in Andhra Pradesh

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Abstract

India is a unity in diversity. It has a numerous castes and cultures. India has attained independence since 77 years. But there is no equal status of tribal people than non tribal communities. These groups belong to backward political, geographic, social, economic etc. India has been introduced several schemes but there is no result of expectations. Hence, Government of India has introduced a special and result oriented independent organization i.e. Integrated Tribal Development agencies in required notified agency areas. Now, our state has ITDAs are working and serve to Adivasi. However, ITDA KR Puram has lays a prominent role towards all-round development of tribal groups in the style of integrated organization. Most of the Girijans are illiterate and agricultural back grounded living with isolate nature far away to use of lower technology. Now, this paper evaluates the role of agriculture in tribal rural interior areas monitoring by Integrated Tribal Development Agency. The study comprises land holdings; main and agriculture workers engaged and analyzed sown areas as well as normal areas in ITDA KR Puram.

Keywords: Agriculture, farmers, Tribal areas. ITDA, Girijans, Adivasis, cultivation Workers, economy, population, irrigation, cultivation.

Introduction

According to the view of Roy Burman (1971) India is a land of castes and ethnic groups. He has an estimate about 427 tribal groups in the Country. According to the Anthropological Survey of India (1967) has estimated the number at 314 considering a number of societies to be the ingredients of a group of tribes chosen by a common name like the Gonds, the Bhils, etc. In 1950, the number of scheduled tribes was 212 recognized by Government of India. This number is amplified in 1956 with the revised list of tribal communities. All the communities are rise to fluctuating figures of tribal communities and the tribal population according to political and economic changes in the country.

India has 12108.55 lakh of population, it has 1045.46 lakh of tribal population with 8.61 percent live in 15.36 Percent of land area. Now, there are more than 730 Scheduled Tribes notified under Article 342 of the Constitution of India. The scheduled tribes are 11.3 percent of total population of rural areas and 2.8 percent live in urban areas. In Andhra Pradesh has 5.6 percent of tribal population out of the total population in the state. In Andhra Pradesh have 12 particularly vulnerable Tribal groups, out of 33 total tribal communities live in different girijan Tandas.

There are 51077 male and 22513 female main workers are in work force, it reveals that 80.44 percent, whereas, 30589 male and 32055 female agricultural workers engaged in ITDA tribal area, it consists 104.20 percent of female tribal groups has work force in primary sector. 13427 female land holders out of 40643 total land holders, it contains around 33 percent of women ownership in tribal groups.

Review of Literature

Chinnama Naidu Jammu & Chalam GV (2021) their study emphasized that tribal agriculture development with mechanization and fertilizers, seed impact while used advanced tools and techniques with proper utilization of water resources in tribal areas ITDA KR Puram, West Godavari district, Andhra Pradesh, India.

Chandrika Sharma and NS Khedkar(2020) The present study is an identified to integrate the various training needs of tribal farmers such as crop production, animal husbandry, fisheries, poultry, goat rearing etc.,. The study concluded that policy, program and management interventions needs to be incorporated with improved efforts to meet the usual tribal farming needs in tribal cultivated areas.

Appalanaidu Pappala (2019): His comprehensive study reveals that horticultural crops viz. mango, guava, banana, cashew, pineapple, etc. in remote agency area of Andhra Pradesh, productivity of horticulture crops helps to reduce an extensive de-forestation and soil erosion. The author collected quantitative data from 45 key informants who belong to tribal population of Kurnool, Prakasham, Visakhapatnam, Vizianagaram and Srikakulam Districts. Andhra Pradesh is the second-largest producer of horticulture crops in India, with 13 percent of gross cropped area and 37 percent of exports in India. Obviously, ITDAs in Andhra Pradesh encourage horticulture crops, such as mango, cashew, guava, pomegranate, and citrus fruits etc. However, "Alphonso" variety of mango introduced in the ITDA, Paderu instead of old variety like Panakulu, Rasalu, Navanootham, Banginpalli, etc. experts suggest that cashew is a mixed crop; this mode can be implemented successfully in penirial crop pattern and selected „Bapatla“ variety by Seethampeta ITDA, Srikakulam district that it was not suitable crop and suggested only west-coast varieties. In addition to citrus crops like Kamala and guava that is the most suitable at Araku valley podu cultivation mode, which can suggest Allahabad Safeda and Lucknow-49 varieties. Furthermore, „Amruthapani“ is a famous banana variety well grown, and gain of tribal agency farmers, with mixed crop of jack fruits and other vegetables. Whereas, the superior quality coffee plants, sown in Araku valley with other beverage crops like cocoa and vanilla, with spices and condiments. Furthermore, Pepper is a well-known crop in Chintapalli forest areas and ginger and turmeric and herbal plants are adopted as sole cropping system in Podu lands with the help of nursery training centers at Araku valley and Kottavalasa, they emphasis, economic- conditions, ecological balance which stabilize the tribes and regenerate forest growth and conserve soil fertility.

Jalaja V & Kala P A (2015) identified the relationship between information and agricultural development of Attappady Tribal Block of Palakkad District, Kerala which suggested ICT based information; modernization, media support, and adult literacy for tribal farmers along with appointment of Agricultural extension officers in field level.

Prabhakar Shetty R.K. (2007) the study emphasis that the social perspectives of organic farming and the status of employment opportunities to unskilled farmers. He discuss as organic farming has the potential to provide positive externalities in social aspects like job opportunities and rural development.

Patekar Subhash (2003), searches what is organic farming Vaidic Agricultural Technique Development and Circulation Andolan Amaravati. He studied the relationship between Agridevelopment and various techniques in organic farming.

ALI Shaviquea, Khan Iram and Ali Ayesha (Jan.2001), stressed the importance of friendly earthworms in cultivation. This work emphasis the significance for soil organisms apart from enriching the soil, they are now increasingly being recognized as indicators of soil health too.

Adhikari T. Manna M.C. and Biswas A.K. (1997) study organic matter improves soil health an overview. They explain that the impact of organic farming improves soil health, condition and its fertility in our cultivation modes.

Bhat A.K., Beri V. Shridhar B.S. (1991) disclosed the Effect of long term recycling of crop residue on productivity, Soil Science. He focuses on the impact on the production due to the use of crop residue.

Need of the study

- The economic development of any state depends on the progress of the agricultural sector, but in our state has requires best practice in farming, and timely access to market information helps to farmers make correct decisions about what crops to plants and where to sell their products with appropriate prices.
- The developments in society depend largely on the availability of products and serve the nation for food security, while tribal farmers adopt traditional methods and produce low level of products and faced several problems in field level, now we can implementation of machinery in cultivation process, while adopt advanced technology methods.
- Now a day the entire world has focused on natural forming methods in agriculture, it produces healthy and energetic food with highly nutritional values.
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Objectives

- To identified the complications faced by tribal farmers in Andhra Pradesh.
- To address depending factors affected by agriculture development in the economy.

- To find out the opportunities of socio-economic factors of tribal farmers in ITDAs.
- To evaluate the status of agriculture machinery implemented by tribal farmers.
- To considers impact crop pattern of tribal sub plan areas of ITDA KR Puram.

Tools Used in the Study

The study conducted through simple quantitative techniques such as percentages, simple and compound growth rates, used for analyzing the data.

Data and Methodology

The study is based on secondary data analyzed, such as published documents, Census reports, Statistical abstract and SLAP data published by Directorate of Economics and Statistics, Andhra Pradesh and Annual reports of ITDA KR Puram, Eluru district etc.

Agriculture Development:

It is one back bone of tribal economy, Paddy is the most pre dominated crop, and Maize is second pre dominated crop area in Rabi season. On the other hand, Samai is the lowest crop 12 hectares, which contribution less; it has a one of the nutrition minor millet sown in Geddapalli, Darvada and Chilakaluru revenue villages of Polavaram Mandal only. It has more demand for millets but not sown by majority of tribal farmers, it can encourage, enhance income level of tribal farmers, while boosting the tribal economy. Finally, our tribal farmers more interest to cultivated food crops than commercial crops.

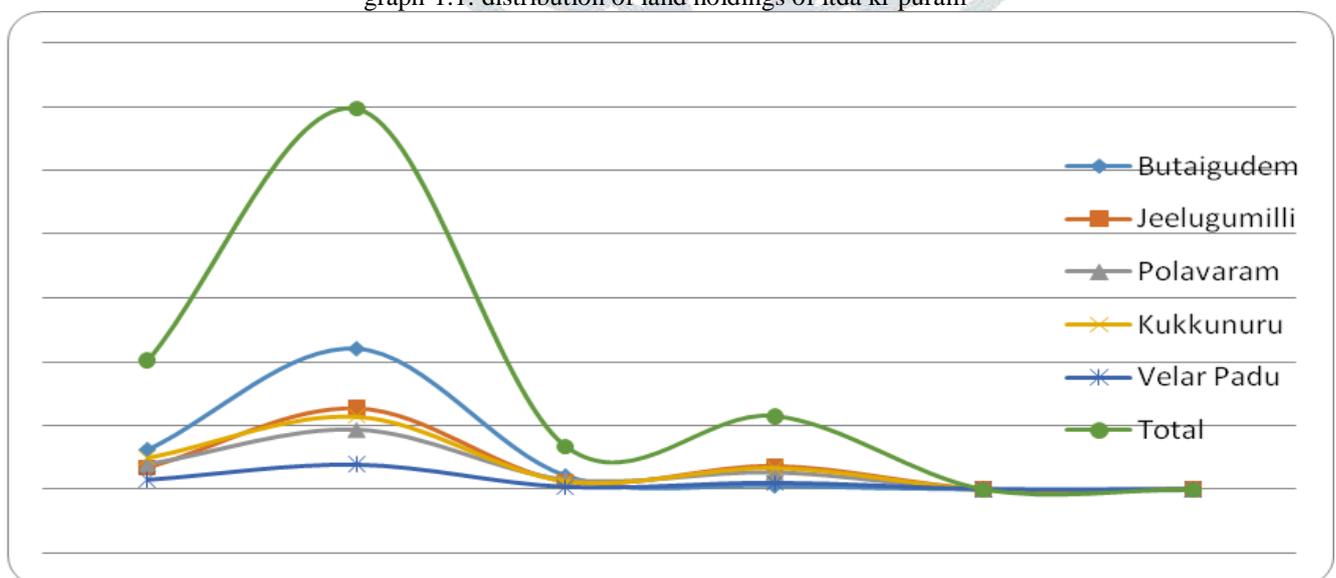
Land Holdings:

table-1.1: distribution of land holdings of itda kr puram during 2014-15 to 2023-24

Mandal	Total land holdings		Female land Holdings		% female holdings	
	Number	Area (A/C)	Number	Area (A/C)	Number	Area (A/C)
Butaigudem	12559	44080	4308	1255	34.30	02.85
Jeelugumilli	6877	25457	2461	7322	35.79	28.76
Polavaram	8109	18835	3271	5545	40.34	29.44
Kukkunuru	10009	22980	2639	6784	26.37	29.52
Velar Padu	3089	7954	748	2093	24.21	26.31
Total	40643	119306	13427	22999	33.03	19.28

Source: Compelled data though World Agricultural Census 2017-18.

graph-1.1: distribution of land holdings of itda kr puram



Source: Compelled data though World Agricultural Census 2017-18.

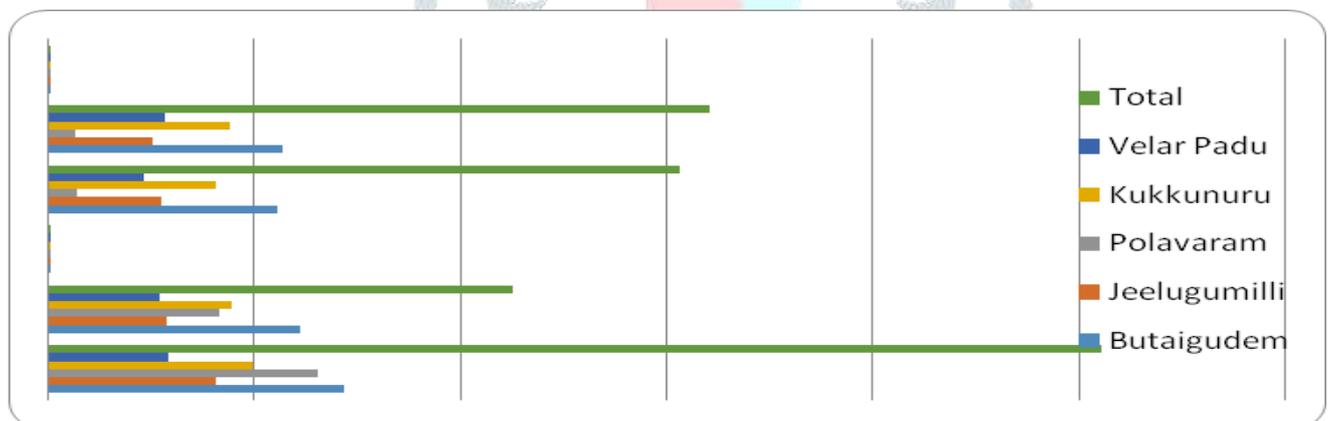
Table and graph -1.1 depicts the share of female land holdings out of total land holding of tribal Mandals in ITDA KR Puram. It is predict from the table that Polavaram Mandal around 40 percent of landholders belonging to women with 29 percent of covered land holding area, which has higher than 33.03 percent of women land holders and 19.28 percent of land area of ITDA covering Mandals. It can represent a picture of

female landholders’ 26.37 percent and 24.21 percent for Kukkunuru and Velairpadu Mandals respectively, which is below average of ITDA women land holding range. However, 35.79 percent Jellugumilli and Butaigudem 34.30 mandal women land holdings are higher than average of ITDA. It can bedetect an interesting thing in the analysis that only Butaigudem Mandal (02.85 Percent) reveals below the average and least women land holdings than ITDA average, remaining all agency Mandalsdesignates above range of women land holdings. Finally, it is concluded from the table that women required minimum land holdings 33.33 percent, but ITDA average land holdings 32.20, which is near to the average. Moreover, the attitude of tribal women are dynamic nature, now enhancing the female literacy rate with promotes women empowerment and gradually reduced dependency from male headed families, especially submerged Mandals of ITDA, Kota Ramachandrapuram.

table-1.2: tribal main and agricultural workers of itda kr puram

Mandal	Main Workers			Agriculture Workers		
	Male	Female	% of Female	Male	Female	% of Female
Butaigudem	14355	12153	84.66	11060.00	11320.00	102.35
Jeelugumilli	8062	5731	71.09	5489.00	4991.00	90.93
Polavaram	13011	8274	63.59	1362.00	1308.00	96.04
Kukkunuru	9886	8873	89.75	8102.00	8808.00	108.71
VelarPadu	5763	5366	93.11	4576.00	5628.00	122.99
Total	51077	22513	80.44	30589.00	32055.00	104.20

Source: Compiled data through SLAP published by DE&S, Andhra Pradesh.
graph-1.2: details of main and agricultural workers of itda kr puram



Source: Compiled data through census reports published by Govt. of India.

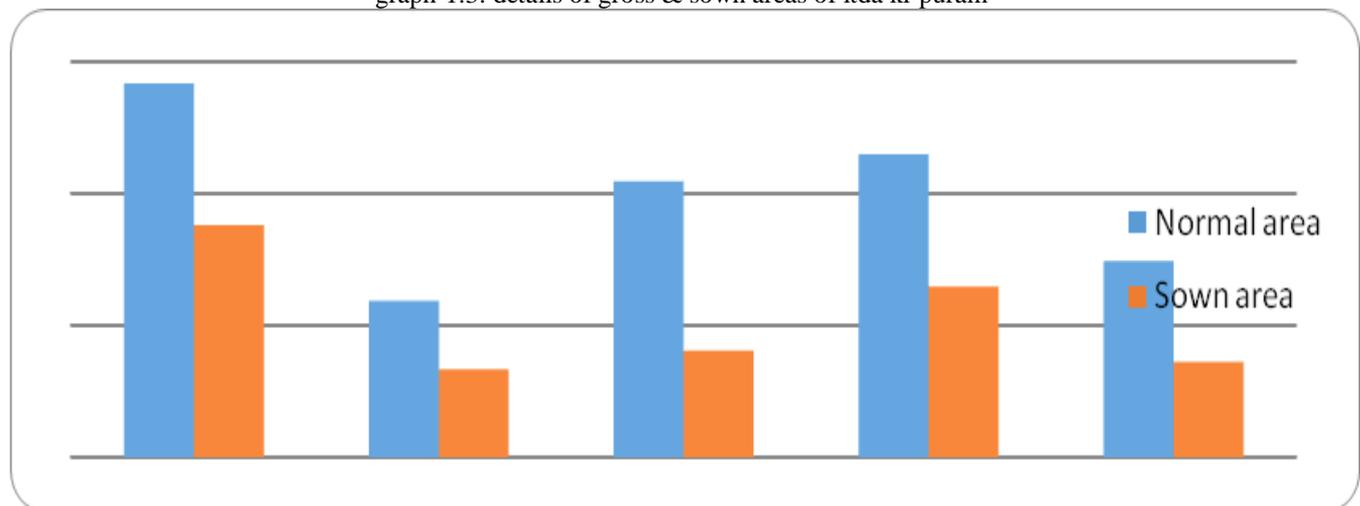
Table and graph -1.2 furnished the main and agriculture workers with percent split in two either male or female workers of ITDA KR Puram. It can precise from the data that all the female main workers are less than male workers in all agency Mandals of the ITDA. It can be trace out the table that only two Mandals i.e Jeelugumilli and Polavaram Madals female work force 71.09 percent and 63.59 percent, that indicates less than average of ITDA average 80.44 percent, the remaining selected agency Mandals such as Velairpadu, Kukkunuru and Buttaigudem Mandals that 93.11, 89.75 and 84.66 percent of respective female main workers discharging her duties, that reveals higher than average of ITDA. Further more, it can be reflect the table that reverse scenario in the field of tribal agricultural women workers. Likewise, it reveals that 123 percent of agriculture women labour engaged in Velairpadu, 109 percent in Kukkunuru and 102 percent of Buttaigudem Mandals, the remaining two Mandals viz. Polavaram in 96 percent and in Jelugumilli 91 percent of women agricultural labour are working in ITDA agency areas. Moreover, it can predict the results that Jeelugumilli Mandal women empowerment relatively higher than that in other remaining agency Mandals. It can be proven by low level of agricultural women labour working in that Mandal. On the contrary, in Velairpadu Mandal 123 percent of agricultural women workers are working in primary sector; it indicates that traditional pattern with lower level of women empowerment than that in other agency Mandals in ITDA KR Puram.

table-1.3: gross area and sown area of itda kr puram

Mandal	Gross area sown (Hectors)		
	Normal area	Actual Sown area	% sown area
Buttayagudem	5671	3519	62.05
Jeelugumilli	2369	1335	56.35
Polavaram	4187	1620	38.69
Kukkunuru	4598	2585	56.22
Velairpadu	2974	1445	48.59
TOTAL	30516	17607	57.70

Source: Periodical Reports of CPO office Eluru,-2023-24.

graph-1.3: details of gross & sown areas of itda kr puram



Source: Compiled data through census reports published by Govt. of India.

Table and graph -1.3 articulates the details of normal and actual sown area in relation cash crops like, cotton, ground nut, and sesamum with other edible oil seeds in West Godavari district agency during the year 2023-24 in related to kharif season. Whereas, the superior quality cotton produced by ITDA K.R. Puram agency area. It can infer the data that 30516 gross are sown out of 7609 hectors of normal area. It can precede the data that 3519 hectors cultivated out of 5671 hectares of normal area in Buttaigudem Mandal that reveals is the leading producer 62 percent sown area covering in the ITDA. On the contrary, it can precise the data that 1620 hectors of land cultivated out of 4187 hectors of land available in Polavaram Mandal that indicates around 39 percent, the remaining land used for other purpose according to the 9 fold classification prescribed by Directorate of Economics and Statistics, Andhra Pradesh. However, Jeelugumilli is a unique Ground nut producing agency Mandals; Velairpadu has the leading producing Mandal with regard to seasumum sown area covering in West Godavari agency area especially in kharif season on special facets. It can be trace out the data can be reflects that one of the noteworthy thing that Rabi sown area is lower than kharif season, due to more than once crop area also lower in the agency Mandals, due to with insufficient utilisation of available water sources in the cultivation purpose.

Findings

The study reveals the results that all the Mandals distribution of land holdings are in equal in the ITDA KR Puram agency area.

- Both number and area also unequal distribution of land ownership like ButtaigudemMandal has highest land owners than other Mandals in the ITDA. However, Kukkunuru, Polavaram, Jeelugumilli and Velairpadu Tehsils have arranged descending order of land proprietors in tribal farmers.
- The study analysed that Jeelugumilli Mandal has highest female land holders than remaining Mandals. Moreover, Kukkunuru, Polavaram, Velairpadu and Buttaigudem Mandals have descending order of female tribal land holders in the study period.

- The study reveals that male main workers are higher than female main workers. The work force also in equal the selected tehsils in ITDA KR Puram.
- The study reveals that Buttaigudem Mandal is the first rank for engaged male main workers than other Mandals in the ITDA area. However Polavaram, Kukkunuru, Jeelugumilli and Velairpadu Mandals recorded descending main work force in the tribal communities.
- The study reflects that Velairpadu has recorded first rank in the female work force than other selected Mandals in the agency area. However, Kukkunuru, Buttaigudem, Jeelugumilli and Polavaram tehsils are descending female workers engaged in main work stream in the tribal groups.
- The study identified significant role of agriculture labour, especially, women empowerment. It can assessed the results that an in equal sharing of agriculture labour in ITDA KR Puram tribal areas.
- The study reveals that Buttaigudem Mandal has highest agriculture labour working than other Tehsils in the tribal groups. Moreover, Kukkunuru, Jeelugumilli, Velairpadu and Polavaram Mandals have descending level of male agriculture labour participated in tribal agriculture lands.
- This study indicates the results that Velairpadu has first rank in participating agricultural activities in the agency areas. However, Kukkunuru, Buttaigudem, Polavaram and Jeelugumilli have prevailed place of women empowerment in agricultural labour force in the selected agency Tehsils in the ITDA KR Puram in the study period.
- The study recognised that land utilisation is also varies from Tehsil to Tehsil in the tribal areas. Whereas, Buttaigudem Mandal has maximum land utilised than other Mandals. However, Jeelugumilli, Kukkunuru, Velairpadu and polavaram Mandalshave recorded descending order of land sowing areas in tribal areas.
- Finally, it can be analysed the results that Buttaigudem Tehsil has a prominent place in land holdings, Main and agriculture workers and cultivated areas.

Suggestions

- To expand NGOs activities in agency areas. It can treat as charity and exempted tax with 100 percent, especially agro based firms.
- Implementation and enrichment of new and innovative techniques in tribal cultivation, with improvement of irrigation facilities in tribal areas.
- To strictly implemented sub plan funds for welfare of tribal people, with special emphasis to PVTGs and marginalized groups with close monitoring of ITDA.
- To multiply budget allocations for tribal welfare schemes, especially, agriculture development.
- To identify eligible candidates, adopt strict procedure, and granting funds directly credited to real beneficiaries bank accounts.
- To creates proper marketing conditions for selling of forest-based commodities, with real values, with the support of Government
- To establish research centers for conduct tribal marketing facilities" and proper training for new and innovative cultivation techniques to tribal farmers with increase productivity.
- To encourage natural forming at tribal areas with government support.
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Conclusion

The study evaluation of agriculture development with land holdings and agricultural

Workers and main work force engaged in tribal labour force with land utilization in the selected Tehsils in the ITDA KR Puram. The study emphasized that suggested that promotes watershed management methods, while increase applied natural manure with water resources and protect forests. Finally, it can be convert the agriculture development shifting to scientific and inorganic to organic manner, manual to mechanization. So, it has some limitations, such as, overfertilizers and pests utilization, do not applied natural manuals, conduct least fertility soil test, agriculture loans, etc. it can solve experts suggestions applied organic modes of cultivation with professionalized skills and maintained well balance between the men and machine while eradication of tribal poverty.

Scope of Further study

The study parameters can be comparing another ITDAs, it can assess performanceevaluation judge best achievement ITDA.

The study is vast subject area, so each parameter has atopic for evaluation of performance of ITDA.

Limitations of Study

- The study evaluates only one sector has not enough for concludes the performance of ITDA level, remaining sectors also influenced.
- In the study based on secondary data, sothe quality of results based on level of quality of data available.

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