

Role of PPV & FR Act, 2001 in Finger Millet Value Chain

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Abstract—As the specter of climate change looms large upon us, it is of utmost urgency to have an unambiguous understanding of IPR laws by all the stakeholders who are persevering to provide a supportive set-up for farmers in India. In this regard, understanding as well as advocacy efforts to usher in a new socio-legal system that strives to recognize the status of farmers as breeders of diverse plant varieties and as conservers of the agro biodiversity would be priceless. From a self-sufficient and short value-chain, the chains have now been elongated from the farms to the urban or suburban markets. The farmer ends up impoverished in contradiction and because of the many other stakeholders who milk it. Lack of infrastructural support, further renders the position of farmer to be further challenged. The paper attempts to look at how PPV & FR Act, 2001 can play a role to the advantage of farmer by giving her more market returns and strengthen her position in the value chain. The study is an analysis of the finger-millet value chain in Koraput region of Odisha. We also try and understand in the study that the implementation of PPV & FR needs to be accompanied by simultaneous establishment of supportive inputs such as education, awareness of IPR instruments, advocacy and widespread networking with other partner agencies would go a long way to usher in a socio-economic system which works in favor of the farmers themselves.

1. “INTRODUCTION”

It is a gargantuan task to meet the present food and nutritional security demands globally and especially in a developing country like India. This is due to the ever spiraling population. The fact that demographic escalation requires more and more food production to feed the volume cannot be overemphasized. In a country like ours which at any particular instance of history may have differing political regimes in governance at national and state levels makes the problem of food security even more complicated.

At any given time, in India, there are different categories or communities of people vying with one another for any basic entitlement. Factors such as illiteracy and vested interests are eating at the very foundations of ‘socialistic’ approach pledged in the Indian Constitution. With technological advancement in agriculture there is an ongoing conflict between two differing perspectives presently at work in

India[6] i.e., agricultural modernization in order to optimize production on one hand and the preservation of indigenous agriculture on the other hand. The latter comprises of a mosaic of knowledge and practices as well as genetic diversity in the ‘flora and fauna’ associated with the regional geomorphology. This existing incongruence between the differing domains within the development discourse makes the process of access unequal. In such a scenario, intellectual property rights with special reference to ‘protection of plant varieties and farmers’ rights’ can be an important tool to redefine the status-quo of the socio-economic sub-structure most tangibly expressed through ‘access to adequate food and nutrition’ as well as access to ‘livelihood’. It is a critical factor with immense potential to augment the income of both especially for the small and marginal farmers who are still outside the ambit of formal extension mechanisms in the country. The paper examines the context of finger millet (ragi) cultivation in Koraput. Advocacy as under Protection of Plant Varieties & Farmers’ Rights Act, 2001 has to be understood in all its implications as of relevance to the farmers (in this case, mostly farm women) who cultivate ragi. The symbiotic relationship between several elements of the socio economic mosaic has to be understood and managed side by side of the realization of Intellectual Property Rights.

2. “THE LOCALE OF THE STUDY”

The study was undertaken in Kundra Block of Koraput district in Odisha in March, 2015. This together with Lamtaput block in the same district is by far the area where majority of Ragi cultivation in (divided) Koraput region is taking place. Koraput is in the ‘Eastern Ghat Highland’ agro climatic zone[3] in the state. The climate is warm and humid with a maximum summer temperature rises up to 34.1[3] degree centigrade and the winter temperature dips to 7.5 degree centigrade[3]. The area receives 1522 mm mean annual rainfall[3].

3. “METHODOLOGY OF THE STUDY”

The study is a qualitative research in order to explore the issues related to farm women's role in the finger millet value chain in the region of Koraput. It primarily constituted of survey method of data collection through structured questionnaires. However semi- structured interviews were also used in order to elicit in depth the views, motivations and problems associated with different groups of stakeholders in order to understand the issues faced by farm women in ragi production and marketing. The various groups interviewed were petty traders at village level (Bania locally called Bepari), the bigger traders at block level, the wholesalers and retailers at Jeypore, the office bearers of the farmers association in Koraput, the district level agriculture officials, Govt. of Odisha and local NGOs namely Harsha Trust which operates at Kundra block of the district.

4. “RAGI PRODUCTION IN HIGHLAND KORAPUT”

As per the Census of India, 2011, in Koraput, about 42% of the total households are small and marginal farmers[3]. The major crops grown by the farmers are paddy followed by finger millets, pulses, maize, and other small millets for food security[1]. The state agricultural data reveals that the total land under gross cropped area in the district in 2008-09 is 394.29 hectares[3]. Out of this, 130.82 ha is under paddy cultivation and 99.75 ha is under other cereals[3]. This is approx. 33% and 25% of the gross cropped area. A majority of the cropped areas are unirrigated, rainfed uplands[3]. During kharif season, the small and marginal farmers here cultivate mixed crops, i.e., upland paddy, ragi, and ragi with oilseeds, pulses and small millets, to have multiple crops to harvest for their food basket[1].

They use a seed- broadcasting method with little attention to nutrient and weed management[1]. Women are mostly involved in the post harvest and storage operations of Ragi. Historically, the tribal communities of Koraput have been known for their self-sufficiency through crop diversity, conservation agriculture, and eco-friendly practices[1]. Its resilience to climatic stresses across a range of agro climatic zones makes it one of the very important crops too[1].

5. “THE CENTRALITY OF RAGI IN TRIBAL NUTRITION”

Ragi, a staple food grain for the rural population of Koraput district which has been cultivated here for many years[1]. It is intrinsically embedded in the tribal cuisine because of its multiple benefits. The local people have well understood that it is one of the most nutritious cereals. It is a good source of fodder for farm animals too. Its unique property of slower digestibility enables longer sustenance[1]. The people grind ragi to make flour they consume as gruel as part of their daily diet, or it is prepared as a kind of local bread mixed with jaggery, also used for preparation of different dishes[1].

6. “PUBLIC DISTRIBUTION SYSTEM (PDS) – A KEY INFLUENCER”

As elsewhere in India, here too the PDS is a major determinant of farming system and crop diversification changes. The cereals provided through its fair price shops have an urban bias and skewed in favor of the non-tribal population[4]. It is primarily rice which is provided here. The policy streamlining presently is in terms of the two cereals rice and wheat. Hence, the transport costs, procurement price of these two cereals have been set in place[4]. The benefits accruing from paddy cultivation are impacting ragi cultivation in a significant way in Koraput. This is due to the macro-economic policies with regard to food production so that the country does not face drought situations.

7. “RAGI - PRESENT STATUS IN THE TRIBAL FOOD BASKET”

Irregular and erratic monsoon cycles and lack of irrigation facilities along with resource degradation have affected the crop cycles and productivity drastically[1]. Over the years, fragmentation of land holdings and diversion of agricultural land into commercial plantations have further marginalised smallholders. Most of the farming families face food-insecure periods of 5 to 6 months which pushes them to migrate out of the area during lean agriculture season[1]. Also ragi intake which is beneficial especially for the children and lactating mothers is well understood by the tribal psyche. But the ragi intake is getting lesser and lesser by the years. The government's nutrition package as given in 'mid-day meal' and 'Anganwadi' is also rice or wheat based. Ragi as a multi benefit food is growing lesser and lesser on the tribal platter.

8. “RAGI IN THE MARKET ”

The erstwhile ragi self sufficiency at household is being adversely affected due to the reasons as cited above. Ragi as a crop is primarily seen for the self sufficiency in terms of nutrition sustenance. The unorganized market and value chain existing is oriented towards this perspective. The value chain starts in the tribal farm however it is getting lengthier owing to enhancement of the forward linkages. Value addition products have caught the imagination of the corporate sector in terms of its health benefits. The new age retail market in shape of super markets and malls are also getting connected with its sale. The globalization of consumer tastes in terms of health consciousness owing to spurt in life style diseases such as type 2 diabetes and obesity has further enhanced the marketability of ragi.

9. “CHANGE REQUIRED IN TRIBAL PERSPECTIVE”

The ragi production is hitherto stocked for household consumption. Many respondents shared that during festival seasons, when the farmers need consumption items for cultural

purposes, they engage in distress sale of ragi. They sell it to the local petty trader mostly. He buys it at throw away price even at this time and either directly sells it in local haat of the same block or the adjoining block of 'Boiparigudda' or sells it to the wholesale dealer in the Jeypore town of Koraput (nearest urban market). So as is evident the ragi stocked at home is not sufficient anymore for the farmers themselves and they have to buy their own ragi (may be) from the weekly market (Haat). Majority of the farmers in the region are either small or marginal farmers. And the fact that they are not organized into formal groups further makes it difficult for them to access the schemes to be implemented by them. Besides, lack of education and awareness regarding agriculture schemes further augments the distance from the existing extension mechanisms. So the farmers need to be mobilized in one accord based on common issues that impinge upon them so that they can bring in the various schemes existing for their benefit. Forming a farmers/producers cooperative society takes it further to the next level to get the schemes to be implemented in the region. Besides, the farmers can be trained on technologies to intensify the ragi production. In the era of corporate farming coming of age in India, these farmers capacity must be build for commercial production of ragi. This will amount to introducing skills to manage the farms on a cooperative basis too.

10. "PPV & FR ACT, 2001"

The existing situation calls for advocacy in favor of PPV & FR Act, 2001. If the Act is implemented for the farmers it will indirectly enhances the agro-biodiversity in a region such as Koraput. This can also help in withstanding the land use and acquisition for industrial and commercial purposes by corporate houses as well as government. Uptil now very few certificates of registration have been issued towards farmers' varieties. By 2011, as per the Protection of Plant Varieties & Farmers' Rights Authority, Government of India, only 3 out of the 305 certificates have been issued as farmers' varieties[2]. Ten certificates have been issued for new varieties and 292 certificates have been issued for extant varieties under the Seeds Act, 1966[2]. Massive awareness has to be generated regarding this act and its implementation for the farmers.

The Preamble of the Act says: "And whereas for accelerated agricultural development in the country, it is necessary to protect plant breeders' rights to stimulate investment for research and development, both in the public and private sector, for the development of new plant varieties"[8]. As per this, the objective is to increase investment. Thus, it seems apparent that the plant breeder is favored especially under this Act. But contrary to the international definition, the definition of breeder in the Indian Act covers farmers as well[8]. "Breeder means a person, or group of persons, or a farmer or group of farmers or any institution which bred, evolved or developed any variety"[8]. This means that farmers are also entitled to the protection of their varieties in the same manner as a new plant variety[8]. However, the conditions required for

granting certificate of registration to the farmers are different. A breeder can enjoy the rights only after fulfilling certain criteria.

Benefit sharing is one of the most important ingredients of the farmers' rights. Section 26 of the Act provides benefits sharing[2]. The claims for it can be submitted by citizens of India, firms or NGOs formed or established in India[2]. Depending upon the extent and nature of the use of genetic material of the claimant in the development of the variety along with commercial utility and demand in the market of the variety, breeder will deposit the amount in the Gene Fund[2]. The Fund will also be utilized for supporting the conservation and sustainable use of genetic resources including in-situ and ex-situ collections and for strengthening the capability of the Panchayat in carrying out these functions[2]. In view of the tribal communities farm practices which are largely found to be sustainable and eco-friendly and less expensive, their awareness about the rights given to them under this Act is of prime importance. Hitherto, others i.e., either individual researchers or corporate firms have taken advantage of this act. But if the tribal farmers' community in the area are educated about this, they can be more motivated to contribute in this regard. They will also be safe this way from the menace of bioprospecting which is carried on at the cost of the tribals' lack of awareness and it doesn't benefit in conservation of agro-biodiversity. There is huge potential in the field of biotechnology which also can be benefited by utilizing the farmers rights in identification of the ragi extant varieties and land races which are drought resistant, can easily survive in rainfed areas without any need for application of inorganic fertilizers. This will enable even more new sturdy varieties which can be modified and propagated as per the agro-climatic zones' existing geomorphology.

Registration will go a long way in enhancing position of ragi in the socio-cultural mosaic of the tribals in Koraput. In this regard R & D has to be strongly promoted in order to identify the ragi extant varieties and land races. The civil society partners (NGOs and Research Institutes) can support through capacity building with regard to identification of the extant varieties and the examination on the basis of distinctiveness, uniformity, stability (DUS)[2]. The value chain presently is being milked by the various stakeholders especially in the end of the chain such as the traders, retailers, wholesalers and manufacturers of the value-added products. In both ways it can be a strategy working in favor of the ragi farmers. One is that the existing ragi chain extends in two ways- one as a seed for the farmers and the other to be milled and used for other value additions either in form of flour, malt and other products. Secondly, as ragi is gaining a higher status in the urban population due to the increase in lifestyle diseases especially of Type 2 diabetes, Hypertension and Obesity, there is scope for the benefits to be drawn by the farmers themselves. Due to these changes in the consumption pattern with regard to food, there is scope for increase in value added products of ragi. The Krishi Vigyan Kendra networks in the

district too can be a very appropriate facilitator with regard to enlightening the farmers on their rights under the Act.

11. “CONCLUSION”

The framework for organizing the ragi farmer is already available in the shape of SHG network in the district. This is so because as per the study, most of the farm activities is done and managed by the women from sowing to weeding to post harvest activities. They can be geared to form producers' cooperatives this will give them more bargaining power for the sale of their produce as well as access to the existing extension mechanism in place customized towards ragi cultivation. Information, education and communication media too need to be geared up towards this. This will be of benefit to all concerned. Among the various extension media, one of the most appropriate facilitator would be the Krishi Vigyan Kendra in the districts. They can play a pivotal role for mobilizing the farmers'

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