Report: UBINIG, Bangladesh

Nayakrishi farmers' seed preservation, land rights, and women's empowerment

Introduction

This action research report is based on UBINIG's ongoing work with the Nayakrishi, a biodiversity-based farming practice led by small-scale farmers in two districts of Bangladesh. UBINIG has been working in these two districts (Tangail and Pabna) with over 80,000 small-scale farming families, out of which, around 47,000 are women, who are involved in seed preservation and other related farming practices. Nayakrishi is spread over other districts with over 300,000 farming households. The farmers own less than a hectare of land each; families with no land ownership are also part of Nayakrishi. The landless families live on raising poultry, goats, and cows on the common land providing ecological and life-affirming services to relatively well-to-do land-owning families. Bondage within the local community is prioritized over relations in price and profit. Landless families exchange their labour and livestock products such as cow dung, and milk with the community members, in exchange of straws and other crop by-products in a way that enhances the image of a Nayakrishi village.

The strategic economic importance of Nayakrishi practice is the reconstitution of agro-ecological and community relationships that is capable to provide a strong, resilient and life-affirming bio-geographical foundation to productive activities of the community that

emphasizes the localization of the economy. As a result, the community develops a very real capacity to resist the devastating consequence of capitalist globalization and fragmentation and breakdown of community relationships and slowly develops strategic insights and visions to reconstitute the family, community, and social and legal forms of relating to land and natural resources for a 'happy life'. Quality of life is prioritized over the so-called growth measured by the abstract number, i.e. GDP and representation of wealth by the quantity of money. Values of nature and natural processes are reclaimed against the price dictated by the capitalist market and unequal global trade.

The Nayakrishi farmers have been active for over 25 years; they receive regular training and orientations on seed preservation and agroecological methods. The common land is preserved and kept free from the use of harmful chemicals so that the poor and landless women can have access to edible plants and also have access to the grazing of livestock. The community relationship is also based on seed exchange and knowledge sharing to increase diversity. In times of natural disasters, the farmers share the seeds with those who have lost the crops and seeds.

This report covers the activities from August to October 2022 to find the relationship between seed preservation, land ownership, and women's empowerment. We have held discussions in groups with the farmers in the villages, mostly with women. Sometimes men were included to get their perception on this issue. We have talked to the women in the Nayakrishi households since all these women are engaged in seed preservation. But we also felt the need to talk to the women in conventional farming families following modern agricultural methods by using laboratory market-based seed along with fertilizers and pesticides. More than 50 women farmers and 10 male farmers participated in these group discussions in the two areas.

The context: entry point of modern agriculture was the change of seed

Farmers following modern agriculture methods for many years became dependent on external inputs for agricultural production. These external inputs include chemical fertilizers, pesticides, irrigation water, and seeds. In Bangladesh, since its liberation in 1971, modern agriculture, or the green revolution was state-supported. Apparently, modern agriculture is an issue of dependency on chemicals and machines, but in fact, modern agriculture had to change the type of seeds first. It had to change from farmer-saved seeds to laboratory seeds. Thus farmers' seed system has been gradually transformed into high external input receptive seeds replacing farmers' and eroding the biodiversity and genetic basis of farming.

The first laboratory rice seed is called IR8. It was developed by International Rice Research Institute (IRRI) in the early 1960s. It is a semi-dwarf and has a yield of 4 to 5 tons per hectare. It is cross-bred rice – the cross of Peta, a high-yield variety from Indonesia and a dwarf variety from China called Dee-geo-woo-gen (DGWG). The *semidwarf-1* gene (sd-1 or

Os01g0883800), was inserted which encodes an enzyme in the production of the hormone gibberellin, to affect plant height. It is known that IR8 in Bangladesh was crossbred with a local rice variety known as *Lotishail*, a farmers' variety.

After IR-8, national research institutes like BRRI developed other high-yielding and hybrid varieties and also allowed private corporations to develop commercial varieties and to have their business expanded along with the massive expansion of the market for their agrochemicals.

Although Green Revolution in Bangladesh was started with the IR8, it was not at all suitable here, because Bangladesh has mostly low-lying rice-growing areas involving heavy monsoons and deep flooding. Bangladesh has hundreds of deepwater rice varieties. But due to the so-called development policies, Bangladesh had to accept an "unfit" rice variety like IR8.

The IR8 was called the miracle seed which was a dwarf variety, which means, the portion that could be the fodder for domestic animals like cows, was ignored, while the grain 'productivity' was made higher. This is the striking feature of all high-yielding and hybrid rice varieties. Of course, it had to come with a package of fertilizer-pesticide-irrigation etc. IR8 was introduced into Bangladesh agriculture primarily for the Boro season (dry winter season) using irrigation. In the 1970s, another IRRI-bred variety IR20 was introduced for Aman (monsoon) season. Since 1973, Bangladesh Rice Research Institute (BRRI) developed several varieties mostly for the boro season, which requires irrigation and the use of chemicals. IRRI varieties did not perform well in the Aman season (which does not require irrigation), except one BR11 developed with traditional landraces[1]. So the new varieties are dependent on irrigation, ground and surface water. The national irrigation coverage has been increasing. According to FAO, in 2008, the national irrigation coverage was 5.05 million ha, about 60% of total cultivable land, with groundwater covering 79% and surface water 21% . [2] However, irrigation cannot be used in salt-affected areas.

[1] Rice cultivation in Bangladesh: present scenario, problems and prospects by Ishrat J. Shelley et al, Journal of International Cooperation for Agricultural Development J Intl Cooper Agric Dev 2016; 14: 20–29

[2] Food and Agriculture Organization (2010) FAOs Information System on Water and Agriculture. http// www.fao.org/nr/water/aquastat/countries_regions/ bangladesh

Bangladeshi farmers primarily grow rice as a major crop and they depend on rainfed rice (Aus season) and monsoon season (Aman season). Modern agriculture has drastically changed this pattern. Now boro accounts for 53.8% of land coverage; followed by aman rice, 38.6%; and aus rice, 7.6% according to estimates in 2018-19. The 'food grains' production during 2019 including rice, reached around 41.57 million metric tons of which Aus accounted for 2.70 million metric ton, Aman 14.13 million metric ton, Boro 19.62 million metric ton[3]. That is about 47% of the rice production comes from the boro season, followed by 34% from Aman season and only 6% from Aus season.

Change of 'seed' is a blow to women

The change to laboratory seeds requiring irrigation, fertilizers, and pesticides is not something women are supposed to be doing. It was all market-oriented and technological. It was a blow to women's involvement in agriculture. Women are not required for seed preservation as the HYV seed would be promoted through the Department of Agricultural Extension (DAE), which was only created for ensuring farmers follow modern agricultural methods. Women were encouraged to be "released" from agricultural activities and get involved in non-farming works. Women have been displaced from the position of command in the agrarian production cycle by their role as the conserver, preserver and regenerator of seeds and genetic resources.

The second blow to the women was through introducing the post-harvesting technologies, like threshers and rice mills. Poor women who used to earn their livelihood through pedal-husking called the *Dheki* were out of job. Some other poor women got jobs in the rice mills at a very low wage and unfavourable working conditions, others had to leave the village to seek jobs in the cities and became slum dwellers. The country now gets cheap labour for readymade garment factories as women have become increasingly redundant in rural areas.

Nayakrishi Andolon: Women-led biodiversity-based farming

The situation of farmers in the late 1980's and early 1990s was already precarious where the farmers practicing conventional agriculture with modern seeds (HYV), chemical fertilizers, pesticides, and extraction of groundwater were fed up with the increasing cost of inputs and lower return on yields. Farmers were looking for an alternative. They were faced with the question of whether they wanted to go back to traditional agriculture or formulate a different practice that supersedes the modern agricultural methods and deals with the new emerging issues of biodiversity losses, ecological questions, farmers' rights, women's rights, food sovereignty as well as a lot of other social, political and environmental issues. It was not going back to old times, rather women should concentrate

[3] CRI, 2019; Bangladesh towards achieving for security, 2009 – 2019, Centre for Research and Information, Dhaka, 2019

on and get prepared for future transitions. So Nayakrishi from the beginning was not a technical transition from chemical-based agriculture to organic, but it grasped all the social, environmental, cultural, and political aspects of the farming communities. Seed appeared as a strategic site of resistance and reconstitution. Women joining Nayakrishi emphasized the preservation of the local variety of seeds as an entry point.

The naming of Nayakrishi Andolon in the early 1990s was itself a challenge. It was when the global environmental and ecological movements were active prior to and after the Earth Summit (1992) held in Rio de Janeiro, Brazil. The term "biodiversity" was heard first time by many environmental activists and the Convention on Biological Diversity (CBD) was in place. Nayakrishi (*Naya* means new, *Krish*i means agriculture) evolved through discussions, debates and analysis. With it, the term *Andolon* (movement) was added as farmers as individuals cannot change the situation that is dominated by corporate interests and global players. The farmers have to continuously fight against the transformation of agriculture to industrial agriculture and against harmful technologies such as genetically modified seeds.

Nayakrishi Farmers follow ten simple rules, mirroring 10 fingers of their hands. The primary aim is to maintain and regenerate living and fertile soil, maintain and regenerate diverse life forms and eco-systemic variability and develop the capacity of the indigenous knowledge system to engage and appropriate the latest advance in biological sciences that could contribute to regenerating the planet, the earth system. These rules, since their initial formulation in 1997, are routinely reviewed based on new information, practical experiences and learning. To be a Nayakrishi farmer, one must follow all ten rules. However, the first five Rules such as 'absolutely no use of pesticide' or 'any chemicals and learning the art of producing soil through natural biological processes' are compulsory. These are the primary obligations to be a member of the movement. Rules 6 to 10 are more appealing to farmers interested in developing more integrated and complex ecological systems not only to maximize the yield but to contribute to innovating interesting ecological designs demonstrating the immense economic potential of biodiversity-based ecological farming and strengthening the practical forms of resistance against globalization. The economy is considered the site where the social exchange takes place between life-affirming activities of diverse communities [4].

Resistance at the production level against chemicals and industrialization of food production is generally known as 'organic' agriculture. However, Nayakrishi Andolon insists that food production must be based on the preservation of 'biodiversity'; making a fundamental paradigm shift from 'organic' food production to' biodiversity-based

[4] Mazhar et al 2021; Farhad Mazhar, Farida Akhter and Upamanyu Das Nayakrishi Andolon: Geolocalization Bangladesh in Resilience in the face of COVID-19, Vol 1 on the series of weaving solidarity and Hope: Beyond Pandemics and Lockdowns, Global Tapestry of Alternatives

agriculture'. Agriculture is not the so-called 'industry', and 'organic' food production that has developed in the industrial food production system within a capitalist market, dictated by the market demand, is still locked within the 'industrial', 'capitalist', and 'production' paradigm.

For us, agriculture is a source of livelihood, far beyond the notion of employment. Agriculture is integrally related to many other occupations such as potters, blacksmiths, weavers, fishers etc. and it involves the entire family, not only one single person as the main breadwinner. Therefore, Nayakrishi is empowering women as they become the most important contributing members of the families.

Seed keeping, the most important task of women has been destroyed through the promotion of the company's patented commercial seeds. Growing food by farmers is integral to keeping seeds for generations. Farmers regenerate and expand their biodiversity and genetic base. Threats to farming can come from agricultural policies and practices that deprive the farming communities of control and command over seed and genetic resources.

Seed preservation empowers women

Nayakrishi began with the slogan "Sisters keep seeds in your hands" which was uttered by a woman farmer in her speech in the early 1990s in a rally of farmers. Since then, seed keeping has been the main focus of the Nayakrishi farmers till today.

In the group meetings with farmers in the village, the issue of seed keeping was highlighted. Ojufa, Shomela and Romesa, are Nayakrishi farmers in Pabna. They used to follow modern agriculture and were not able to keep seeds that they grew in their own hands. Their husbands bought the seeds from the market. In 2007, they received training on Nayakrishi farming methods, which emphasized the preservation of seeds. The traditional seed varieties needed to be recollected and regenerated because they were disappearing. Since then, the farmers joining Nayakrishi have been preserving the seeds that they needed to be cultivated. They think about the crops they would like to grow and if they do not have the seeds, they collect from other

Nayakrishi farmers in the neighbouring villages. So, they have a good relationship with the farmers as they can get the required seeds from fellow farmers in the village. This happened mostly among the women in farming families. Seed collection, exchange, and regeneration created a sisterhood bonding among women in the farming communities.

Seed keeping has enhanced their relationship with the family as a very important contributor to farming. Farmer Ojufa said

"husband is the owner of the land; but I have the wealth (seed). My husband waits till I bring out the seeds from the house".

The company's commercial seeds are increasingly dominating the market, so they decided to sell Nayakrishi seeds to other farmers. Four women farmers sold 165 kilos of 2 rice varieties (Kartikshail and Pakri) at a price of Tk 7425 (USD 74). These women spent the money earned on their family needs but by their own decision. This gives them the pride of being able to take the decision. Their husbands did not have a claim over this money as it was the women's work. They also sell vegetables, lentils, spices and other cereal (corn, wheat).

Like Pabna, in Tangail, Nayakrishi women farmers are the seed keepers, too. They possess the knowledge and the skill to check regularly if the seeds are in good condition. Good seed preservation leads to a good yield of crops, and less pest infestation. They dry the seeds regularly to ensure their quality. In the farming family, women know what kind of seeds have been preserved in different seasons. Laughingly one woman said,

"Men do not always remember what seeds are there. Men prepare the land, but women decide what kind of crops will be appropriate for cultivation in those specific plots of land. There is high, medium and low land. So women decide the varieties appropriate for each type of land. "

Despite not being the owner of those pieces of farmland, women farmers enjoy a *de facto* authority to take decisions about crops. Such power depends on the number and quantity of seeds preserved.

Kajoli Begum, a farmer in Tangail could earn enough from farming activities to be able to buy a 60 decimal piece of land. She kept 30 decimals in her name and the rest in her husband's name.

Giving the seeds by the women to their husbands is not only a one-time action. Women want to make sure that men would take care of the crops enough so that she gets quality seeds from the crops. They must identify a corner of the field of crops which have better productive seeds. In fact, women visit the fields themselves and point out which part of the field will be good for seeds.

Seed keeping is linked to land types

The cultivable land is not entirely flat in the villages. Due to the presence of two major river systems – the Brahmaputra and the Ganges, land inundation occurs in different seasons which influences the land use and the cropping intensity. Even a small village land can include many land types as classified by FAO.

The land types are classified as the following[5]:

- High land (HL), which is above normal flooding level
- Medium High Land (MHL) which is flooded upto 90 cm deep during the flooding season
- Low land (LL) is normally flooded upto 180 cm to 300 cm deep during the flooding season
- Very Low Land (VLL) which is normally flooded deeper than 300 cm during the flooding season

Small-scale farmers' land types are divided into high, medium or low land. Women are aware of the land types they own and accordingly they decide about the appropriate seed variety they need to preserve. In the Pabna villages, the women reported about two types of land, low land and medium low land. So they can cultivate in two cropping seasons – Aman season (monsoon) for rice and Rabi crops (winter season) for vegetables and lentils etc. Accordingly, they preserve the seed varieties to make sure about the proper use of the land.

Women's seed keeping helped restore crop loss

Farmers Majeda, Marjina, Ojufa and Rina Begum narrated a story of how the women's seed-keeping restored crop loss. In 2020, there was a flood and several varieties of rice (Pakri, Kalapat, Madva, Kumra, Goid were all inundated in about 73 hectares of land. But women were able to give another round of seeds of the same rice varieties to replant. In the low-lying land about 80 hectares of land were inundated. In these lands, women asked their husbands to wait for 2 months and cultivate the winter crops. They had the seeds for winter crops.

Marjina said

> *My husband asked me to give khesari (pulse) seeds; I said but it would be good if you mix the mustard (oil seeds) in between to get better output.*

[5] M.J. Uddin et al Land Inundation and Cropping Intensity Influences on Organic Carbon in the Agricultural Soils of Bangladesh, Catena 178 (2019) 11–19 https://doi.org/10.1016/j.catena.2019.03.002

He said, where can he get mustard seeds. I said, I will give you. So he agreed. We got khesari pulse and also 120 kilos of mustard which was sufficient to meet the needs of the family.

The seeds help the sharecroppers to retain the land to cultivate crops. If they continue to lose crops the land owner would not share out the land to him.

On the other hand, farmers following chemical-based modern agriculture do not have the backup of modern variety seeds from their wives at home. Farmer Delwar Hossain in

Tangail informed that modern agriculture farmers are dependent on external inputs including seeds. They also do not look at the land types. So whenever a crop failure occurs they become vulnerable and have to sell land to pay the debt. Many farmers do cannot afford to keep their farming operations. So they migrate to the cities and/or go abroad by selling the land. In this way, the number of farmers is decreasing in the villages. Farming is not profitable anymore, so they shift to non-agricultural occupations. Women suffer the most under such conditions.

Intensive engagement in agriculture: Women become owners of the land

Most women farmers do not want to differentiate between husbands' land ownership and her own. They say, *"my husband's land is mine too; it does not matter who has the entitlement*". But in case of divorce, she does not get any share of the land. Muslim women are entitled to get half of the brothers' share of land under the Inheritance law, and one-eighth of the husband's land in case of the death of a husband. Of course, women can purchase land in their names. In the Pabna village 4 women have got land in their names. Ojufa Begum 0.5 acre of land from her husband. Sohagi Begum saved money from the selling of the seeds worth Tk.45,000, sold a cow at Tk. 110,000 and bought about 7 decimals of land with about Tk. 155,000. Helena and Rina Begum got a share of land as an inheritance.

In Tangail, Marufa saved money from income from different sources and bought 25 decimal of land. But she registered it in her husband's name. She thinks she has two children, daughter is married off. So she is well-established with her husband. Her husband's land means her land.

Shilpi Begum got 7 decimal of land as an inheritance.

Women in chemical-based agriculture and land rights

A focus group discussion was held with women in modern agriculture or chemical agriculture-based families. Their families have more land ownership, more than one acre to a hectare of land. They cultivate HYV rice (BR-29, BR-11, BR-49, BR-72) and some local variety rice such as Chamara, Patjag, Abchaya. It is to be noted that the laboratory HYV seeds have a number as their names, while the local varieties have genuine names traditionally given by farmers. They keep the seeds of the traditional varieties, while numbered rice seeds are bought from the market. They cultivate vegetables like potato, radish, amaranth, pumpkin, bean, tomato, spinach which are hybrid and HYV, therefore buy from the market. For some cash crops like mustard, they buy hybrid mustard (Dhupri) is bought from the market, and the traditional variety Maghi is preserved by women.

In response to the question, among these seeds which ones they like the most; the response

was in a chorus voice "our own varieties" i.e. the traditional varieties. They keep these seeds for their own consumption as they feel the application of pesticides and fertilizers makes the taste bitter. They know the names of the fertilizers "urea", "Potash" and different pesticides and herbicides; but they could not tell the price of those inputs. They mentioned the use of "herbicide" more than pesticides. This is locally called "ghashmara" meaning destroying the grass. These are available in powder

and in liquid form. They could not tell the brand name or the price. The reason for using the herbicide was to save the labour cost required for weeding.

Women dislike the use of fertilizers and pesticides, as they said these cause diseases like cancer, ulcer, skin problems. The food is not tasty.

Although the head of household, the husbands of these households, prefer to cultivate the HYV/hybrid varieties they appreciate the seed keeping of the traditional varieties. Marjina said,

> *"My husband appreciated that, it saved money and with that money I will be able to bear the cost of ploughing. The seeds look good".*

Since the land types are different and in the low-lying land, they need traditional varieties of rice to cultivate in the monsoon, traditional seed varieties are needed.

Land in the name of women?

Like other women in rural areas, cultivable land is not owned by women. Men own the land and also decide about the crops they want to cultivate with modern methods. Women have very little decision-making power in this respect. Since the seeds and all other inputs are bought from the market, there is no need for the "husbands" to discuss with their wives.

However, in the households having mixed cultivation methods using traditional seeds, then they have to discuss with their wives.

Few women reported that they own some land. Shomola's family has 3.50 acres of land, out of which 40 decimal is in her name. Her husband gave it to her. The reason is that they do not have any daughter, only 2 sons. It is feared that after the death of her husband, sons may not take responsibility for the mother. So for her security, a portion of land is given to her.

On the other hand, Marjina also has two sons and no daughters. But she does not own any land and she never demanded from her husband to give some portion of land entitlement in her name. Her reason was different. She said

"if I had daughter I would take the land so that I can give it to her, in case her brothers do not take care of her".

She believes that her husband loves her enough and she does not feel insecure as she has good command over family matters.

Jarina owns 22 decimal of land, but she cannot decide about the crop. Her husband follows modern methods and uses HYV seeds and other chemicals. Asked if she could decide about not using any chemicals in the land, the response was

"then I will have show a very good performance of crops, otherwise I would be accountable to my husband". But what about the situation when his crops fail? Jarina said "I cannot say anything against my husband, it is illegal".

As inheritance women hardly bring the land that they get. Shomola got 70 decimal of land, but her brothers are younger than hers, so she asked her brothers to use the land. Marjina's brothers do not want her to take the share. Rani gave it to her nephews. Women however want to keep the land inherited from father with their brothers. They need to visit their parents home occasionally, so they want to keep the brothers happy.

As they say,

"*Jhee beti thekley jai bapr bari*

Raeen-patil bhangley jai kumar bari"

[women in the situation of deprivation go back to their parents' home; and the broken earthen pots go to the potters house]

So land ownership as inheritance is a security asset for women. As per Muslim Law, women get one-eighth if there is son and one-fourth if there is no son.

Women recited a rhyme

"*Baper bari Oarisher malik, shamir bari 2 anar malik*"

Father's property is inherited, husband's property is one-eighth

"If there is land in women's name, there is quarrel"

Selina saved money by selling vegetables from her kitchen garden and that money was enough for an advance payment of a piece of land. However, her husband was not willing to purchase land at that moment, so Selina decided to use her saved money. But once she was prepared to purchase the land with final payment, by selling two cows that she raised and was ready with the money, at that moment the question arose, whether she can purchase the land in her name. No, that was the answer from her husband. Her children also suggested that in order to avoid quarrels in the family Selina should let the land be purchased in the name of her husband.

Men know and monitor women's seed keeping

Seed keeping by women is not a secret act; it is a family activity. The seeds of the crops that are grown on the cultivable land are preserved. Seeds are preserved by women in the Nayakrishi farmers' households. Before harvesting of the crop women go to the field and chose the right portion of plot to harvest the seed. They need special care to preserve the seeds immediately. For rice seeds, have to be hand threshed on the same day and not

machine threshed and processed further for drying (seven times under the sun).

For mustard, the first lot of harvest must be threshed and dried immediately. It cannot be kept without drying.

Different crops need different methods. However, men as head of the household has the knowledge of how much the seeds are kept. Men also know about the quality of seeds and about the skill of some women better than the others. If the wife is not able to preserve good quality seed, the men get annoyed and say “Aren’t you a woman?

Laughingly women shared a story of lentil seeds. They save the seeds of lentils in significant quantities. These seeds are also very nice to eat after baking. Once Selina’s pregnant daughter wanted to eat baked lentils. Selina thought she can use a handful from the seeds of lentils that she kept for the next season. But when her husband was going to sow the seeds (broadcasting) he could feel that the quantity is less than what it should have been. He came back home and asked Selina. Selina admitted that she did use the seeds but it was for his pregnant daughter’s wish that she had to respond.

Men get very angry if women use the seeds for eating purposes. They use abusive language and yell “why do you eat all the time?” For the farmers seeds are wealth, so any other use except sowing is not permissible. For women it is more than wealth. It is also social relation building and family bonding that money cannot bring.

So women laugh at this kind of annoyance of the husbands over the use of seeds for other purposes. Women know that it is the women who can keep the seeds and not men cannot do it without women. Men are obliged to women on this issue and often compromise afterwards if they get too angry.

Conclusion

Land and seed are inseparable from each other for any farming method. The land is not a uniform type in different areas, so is the seed which has so many varieties. The quality, or the fertility of the land is one of the determinant factors for the productivity of crops. In the same way, the quality of seeds is crucial. In modern agricultural methods, the natural relationship between the land types, seed varieties has been destroyed to make monoculture production with laboratory seeds and artificial and chemical fertilizers to determine productivity. This has also serious implications for the family relation and the

role of the family as the economic and ecological agent of production and regeneration of nature. Women have been involved in agricultural works from seed keeping to post-harvest activities, except plowing and weeding works in the field. However

In this research work for Feminist Land Platform, we are able to show that seed, land and women are integrally related to each other and the small-scale farming households can only sustain if they show proper respect to this relationship. In Nayakrishi farming families this relationship is quite obvious as they depend only on the traditional varieties of seeds which are preserved by women. Even in modern farming households, women are keeping some traditional varieties and are able to show their worth for food production. However, land ownership is minimal because of the existing laws and patriarchal social norms in the country.

However the major concern with regard to seed is the intellectual property right. Originally legal norms evolved from the private property in land, later it has shifted to private ownership of water bodies, rivers and oceans. It is important that Feminist Land Reform address the privatization of land, water, seed and knowledge system from the persoective of land reform. It is important that women expand the meaning or the 'figure' of land as the nature in general that should not be privatized for corporate profit and excploitation, as we see now with regard to seed and genetic resources.

Nevertheless, seed keeping gives women the right and power over farming practices and the production of crops. It gives women the confidence and sense of dignity as human being who takes care of their families as well as the society.