THE SEED INDUSTRY DEVELOPMENT ACT OF 1992:

DISPOSSESSING THE FILIPINO SMALLHOLDER

SEARICE
SOUTHEAST ASIA REGIONAL INITIATIVES FOR COMMUNITY EMPOWERMENT

TWN
Third World Network

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CONTENTS

ACRONYMS

ABD	Accumulation by Dispossession
BPI	Bureau of Plant Industry
CBD	Convention on Biological Diversity
DA	Department of Agriculture
DENR	Department of Environment and Natural Resources
FGD	focus group discussion
IPR	intellectual property right
ITPGRF	International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)
LGU	local government unit
NSQCS	National Seed Quality Control Services
PANAP	Pesticide Action Network Asia and the Pacific
PhilRice	Philippine Rice Research Institute
PGR	plant genetic resource
PGRFA	plant genetic resources for food and agriculture
PVP	Plant Variety Protection
R.A.	Republic Act
RCEF	Rice Competitiveness Enhancement Fund
SEARICE	Southeast Asia Regional Initiatives for Community Empowerment
UDHR	Universal Declaration on Human Rights
UNDROP	United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas
UPOV	International Union for the Protection of New Varieties of Plants
WB	World Bank
WTO-TRIPS	World Trade Organization's Agreement on Trade-related Aspects of Intellectual Property Rights

SUMMARY

The Seed Industry Development Act of 1992, or Republic Act (R.A.) 7308, was enacted purportedly to promote and accelerate the development of the seed industry in the Philippines, as well as to conserve, preserve and develop the plant genetic resources of the nation.

This study sought to investigate whether R.A. 7308 has had discernible effects on the seed-saving and farming practices of smallholder farmers and farmer-breeders in selected provinces in the Philippines by conducting interviews and focus group discussions (FGDs) with directly affected farmers and local government officers engaged in the agricultural sector.

1 The findings indicate that farmers are getting used to seeds provided by the government but that some seed saving practices and exchanges of seeds persist among those interviewed.

2 It is also apparent that small farmers occasionally avail of seeds provided by the Department of Agriculture (DA). More frequently, however, they exchange and share seeds with their fellow farmers in order to keep their expenses to a minimum, especially as they prepare for the next cropping.

3 All farmer breeders who continue to do their breeding of seeds desire some recognition and support from the government for their efforts, but apparently this has yet to happen.

4 The small farmer-breeders will continue to breed their own varieties because they want to maintain and strengthen their know-how and ability to improve traditional seeds. This gives them some measure of self-satisfaction, and reduces their input costs, which translates to additional income while contributing to broader goals like food security for the community, enhanced seed security, and greater collective ability to cope with climate change.

Above and next page photos: Focus group discussions in Malum Organic Village, Bago City, Negros Occidental.

Through interviews and focus group discussions, this study sought to investigate whether R .A . 7308 has had discernible effects on the seed-saving and farming practices of smallholder farmers and farmer breeders in selected provinces in the Philippines.

INTRODUCTION

Regulatory Framework for the Philippines' Seed Systems

Seed systems pertain to the entire chain of activities involved in the production, post-harvest processing, and distribution of seeds. These activities are carried out by various entities like households, cooperatives, academic institutions, research institutes, and other government agencies which have the mandate of guaranteeing a sustainable seed flow for all sectors of society (FAO, 2014). It is through seed systems that farmers are able to access high quality seeds of the new crop varieties that they need and want (CIAT, 2019), including seeds that are adapted to their needs and production systems (CIP, 2021). As such, seed systems are one of the foundations of agricultural development and food security.

Tobias and Mapacpac (2021) posit that a legislative regulatory framework in the form of a seed policy is a requirement of any seed system. This will regulate the expanding and increasingly diversifying seed sector for stakeholders engaged in the seed production system, particularly for the benefit of farmers. One such legal framework is the Seed Industry Development Act of 1992, also known as Republic Act (R.A.) No. 7308, which was enacted by the Philippine Congress on 27 March 1992.

Also referred to as the national seed law, R.A. 7308 declares the policy of the Philippine Government to promote and accelerate the seed industry's development, and to conserve, preserve and develop the country's plant genetic resources (PGRs).

A National Seed Industry Council (Council) was created to implement the seed law's vision.

The Council is tasked to do the following:

- develop policies that will promote plant breeding activities for the development of the country's genetic resources;
- boost the adoption of systems and practices that will improve the quality of seeds that will be distributed to farmers by persons, associations, cooperatives and corporations engaged in genetic resources conservation, varietal development, production and processing, quality control, storage, marketing and seed distribution;
- advance the creation of infrastructure and support services in priority areas targeted for the development of the seed industry;
- craft an extensive medium- and long-term national seed industry development program to achieve self-sufficiency for the country in high quality seed supply; and
- endow awards, subsidiaries and other forms of assistance to seed or plant breeders who are working to develop excellent varieties or cultivars (Tobias and Mapacpac, 2021).

The Council was expected to develop a Seed Industry Development Program 90 days after its establishment. While this program did not materialize, it was supposed to lay down the roadmap for achieving self-sufficiency in the supply of high-quality seeds. In any case, R.A. 7308 defines the roles of additional entities in order to implement the National Seed Industry Development Program. The law also offers incentives for the private sector to develop the local seed industry. A Technical Secretariat was created under the Council to take over the functions of the erstwhile Philippine Seed Board (Board)'s Technical Working Groups (FAO, 2019).

R.A. 7308 stipulates that the Bureau of Plant Industry (BPI) of the Department of Agriculture (DA) should take the lead in the national seed system.[2] At the same time, the larger Seed Industry Development Program, of which the seed system is part, involves different activities, and is participated in by other institutions, agencies, and the private sector. For instance, the Philippine Rice Research Institute (PhilRice) was given the task to develop appropriate rice varieties designed for Philippine conditions and to propagate them as breeder, foundation, and registered seeds. The Council spearheads this activity, but the latter also involves different institutions formulating policies related to seed systems, guided by both domestic and international treaties.

[2] Based on an unpublished interview conducted by the researcher.

Implementation and Weaknesses of R.A. 7308

Considering that the purported objective of a seed regulatory framework is to "benefit farmers," as mentioned in the previous section, can R.A. 7308 be said to have succeeded in doing this? To begin with, this law can hardly be considered as laying down a "regulatory framework" because it does not even provide for the monitoring of the quality of the seeds that are produced and distributed to farmers.

At the same time, in defining the Philippines' seed system, this law makes no mention of the farmers' seed system, thus clearly indicating that it was intended to cater primarily to the formal seed system.

R.A. 7308's Declaration of Policy should promote the values that Filipinos cherish. In particular, the law needs to embrace the principles of **inclusivity, equitability,** and **sustainability.**

Contrary to this, **R.A. 7308 is not inclusive.** To be truly inclusive, this law must recognize the remarkable contributions of the farmers' seed system, which makes up—depending on the crop—approximately 80 percent of the total seed requirements of agriculture (IPES-Food, 2017). At the same time, it must acknowledge the fact that farmers are dependent on their seed system for their survival.

R. A. 7308 is not equitable. Equitability means providing access, just treatment, and opportunities and benefits for every stakeholder, including support for livelihoods through food, habitat, and jobs; raw materials for food and other products (Maryville University, 2022). Smallholder farmers continue to face a multitude of barriers and challenges, while private seed companies continue to reap profits and make huge capital investments through applications for intellectual property rights (IPRs) on varieties they develop. At the same time, farming areas which offer a limited market and few economic incentives are neglected by private seed growers. Without support for their seed system, farmers in these marginalized locations are forced to depend on limited choices of seeds that are often expensive and not adapted to their local conditions.

Lastly, **R.A. 7308 needs to incorporate the shared vision of sustainability.** The introduction of high- yielding varieties has already displaced many traditional varieties and enormously reduced the diversity of PGR materials available to farmers for breeding. Losing this diversity will worsen the already difficult situation of smallholder farmers and will have serious implications on their capacity to adapt to all challenges, including to climate change (SEARICE, 2019).

REVIEW OF LITERATURE

The Precedence of Local Seed Norms Over Seed Laws

La Via Campesina (2015) states that the regular exchange of seeds among communities has allowed crops to adapt to different conditions, climates, and topographies, thus ensuring that the world enjoys a diversified diet.

Pesticide Action Network Asia and the Pacific (PANAP) (2010) argues in one of their fact sheets that the practice of saving traditional local and farmer-bred seeds not only ensures that farming communities retain control over them—promoting autonomy and food security—but supports *in situ* agrobiodiversity conservation and "barefoot innovation," which are all ecological, social, and political imperatives today.

Local norms regarding seeds precede any written law on the subject. Thus, it could be argued that seed laws should apply only to corporations, not to farmers. Farmers who produce and exchange their own seeds within their own community or with neighboring communities should not have their activities governed by laws (La Via Campesina, 2015). As PANAP states, where technological controls have no effect, laws become the mechanism of choice for corporations to either prevent farmers from saving seeds or to coerce them into paying for farm-saved seeds, which become, in effect, corporate seeds.

Photo above: Focus group discussion with North Cotabato farmer partners and members of the Farmers' Organization for Organic and Diversified System (FOODS), a farmers' federation.

An important development issue is the sustainable availability of good quality seed. Niels Louwaars (2007) argues that the development of a commercial seed provision system is neither desirable nor realistic for most crops. When policies take the most advanced crop as a reference for investments and regulation, major problems arise due to the differential speed of seed system development between crops and target groups. Another point to consider is that trade and investment agreements are tools used by corporations to force governments to adopt policies promoting corporate rights over seeds. Saurav Ghimire (2022) further states that while seed certification laws were introduced with the intent to protect farmers from bad seeds, they have resulted in farmers being pushed out of the plant breeding scene by seed companies.

Seed laws today are also repressive. NGO Grain (2005) explains that seed laws dictate which kinds of seeds cannot be sold, cannot be exchanged, and in some cases cannot even be used, all in the name of regulating trade and protecting food growers. Seed laws work alongside IPR regimes, like plant variety protection (PVP) and patent laws, which prohibit traditional seed varieties from circulating freely because these seeds were not produced by the seed industry and are thus not covered by IPR. From a human rights perspective, the introduction of legislation that creates hindrances to the reliance of farmers on informal seed systems violates the human rights obligation of the state because it deprives farmers of the means to earn their livelihood.

The Polarity of International Agreements

Restrictions on Farmers

The International Union for the Protection of New Varieties of Plants (UPOV) was adopted in Paris in 1961. Accession to it is extremely rigid and inflexible, according to Syam et. al. (2023). Indeed, the inflexibility of this system deprives new member states of the opportunity to develop plant variety protection (PVP) laws that are adapted to their agricultural system, their level of development and their needs. The UPOV accession process is also unfair because of its unequal treatment of states: if a new member state wants to ratify it, its legislation is analyzed word by word. Failing to conform to the provisions of the UPOV Act, the law must be amended. In contrast, there is zero scrutiny in the case of an existing member ratifying the same act. As a result, the UPOV Secretariat has more power of definition in the development of a PVP law compared to an elected national parliament.

UPOV generally prohibits farmers from saving and exchanging seeds of protected varieties for commercial purposes, but it does allow member states to permit some seed saving on the condition that farmers pay royalty fees (PANAP, 2010). The underlying problem with UPOV is that it was developed by a few industrialized countries to serve their own needs and

those of their industry, and is now being imposed on the whole world, robbing the Global South countries of the opportunity to develop alternative systems of PVP that are appropriate to their needs and priorities (Syam, 2003).

The UPOV Secretariat, in collaboration with the East Asia Plant Variety Protection Forum as well as associations of private seed companies, such as the Asia Pacific Seed Association, is actively encouraging countries to join UPOV. They have been using Vietnam as their poster country to deceive developing countries into believing that Vietnam's membership to UPOV has been a contributing factor to its agricultural development. They have even commissioned a study to promote these false claims and have been offering their services to revise the PVP laws of their target countries. This is what they have done in a number of developing countries, such as Myanmar.

Meanwhile, Asian governments have joined or are being pressured to join the UPOV as a shortcut to complying with the World Trade Organization (WTO)'s Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) (PANAP and GRAIN, 2010).

However, TRIPS under the WTO does not mention UPOV. Rather, Article 27.3(b) of the TRIPS Agreement mandates member states to have "an effective *sui generis* system of protection." This means that a country may adopt "its own" or its "unique" system of PVP that it deems appropriate for its situation and needs.

Nevertheless, developed countries continue to push UPOV membership on developing countries, making it a condition of free trade agreements. At the national level, powerful agro-chemical corporations usually influence decision-makers to join UPOV and to adopt a PVP system that favors their interest —to have monopolistic ownership of plant varieties.

Empowering Farmers

In 2018, the Philippines adopted the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP). This UN General Assembly Resolution aims to promote the interests of smallholder farmers in developing countries like the Philippines where the legislators have inadequate capacity to protect farmers' human rights and where the state itself is weak. UNDROP's preambular text considers and reaffirms the United Nations Declaration on Human Rights (UDHR), and the International Convention on the Elimination of All Forms of Racial Discrimination, among others. It provides

Focus group discussion with farmers in President Roxas, North Cotabato

for 22 peasants' rights, and its definition of "peasant" encompasses indigenous peoples and peoples who are engaged in artisanal or small-scale agriculture, crop planting, livestock raising, pastoralism, fishing, forestry, hunting or gathering, and handicrafts related to agriculture or a related occupation in a rural area (UN General Assembly, 2018).

Meanwhile, the core objectives of the Convention on Biological Diversity (CBD) and of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), to which the Philippines is a state party, are the conservation and sustainable use of PGRs. Eaton (2002) states that the CBD, which entered into force on 29 December 1993, guarantees the sovereign rights of states over the genetic resources found within their borders. Furthermore, the CBD calls for an equitable sharing of benefits derived from genetic resources and recognizes the rights of farmers to a share of these benefits, given the traditional role of farmers as agriculture's conservators and developers of genetic resources. On the other hand, the ITPGRFA, which entered into force in November 2001, recognizes that farmers and locals as well as indigenous communities around the world are at the forefront of the conservation and development of PGRFAs and thus, of world food production. However, Vernooy et. al. (2020) argues that although farmers' rights have been debated intensely at the international level, their effective implementation at the national level remains a significant challenge.

THEORETICAL UNDERPINNING

David Harvey's "Accumulation by Dispossession"

The neo-Marxist power perspective is an appropriate theoretical framework for this study because it is a theory of power in political ecology, and it emphasizes how power is exercised through economic domination and exploitation. The study is further underpinned by Marxist geographer David Harvey's "accumulation by dispossession" (ABD) concept, which modifies Karl Marx's notion of "primitive accumulation".

Marx saw "primitive accumulation" as a key feature of how capitalism works. It is a historical process of divorcing the producer from the means of production through privatization of the commons. According to Harvey, Marx saw it as entailing the taking of land, enclosing it, and expelling a resident population to create a landless proletariat, and then releasing the land into the privatized mainstream of capital accumulation (Harvey, 2003). "Private accumulation" also refers to the expropriation of direct producers, and more specifically, the dissolution of private property based on the labor of its owner. Harvey then proposes the term "accumulation by dispossession" to describe current processes. In political ecology, the introduction of this term has sparked a renewed interest in the combination of capital accumulation and dispossession (Benjaminsen and Bryceson, 2012). His theoretical extension encompasses more recent economic dimensions such as IPRs, privatization, and exploitation and predation of nature and folklore.

While some features of Marx's primitive accumulation remain, other features that he talked about need to be fine-tuned. New mechanisms of ABD include new forms of commodification, both of nature and of culture. Harvey states that the "patenting and licensing of genetic material, seed plasma…can now be used against whole populations whose age-old practices had played a crucial role in the development of those materials." A few large companies, such as pharmaceutical companies, are benefiting from rampant biopiracy and the pillaging of the world's genetic resources (Harvey, 2003). The suppression of rights to the commons, and the suppression of alternative or indigenous forms of production and consumption are analogous to the suppression of farmers' rights to seeds.

Focus group discussion with farmers in Lambayong, Sultan Kudarat

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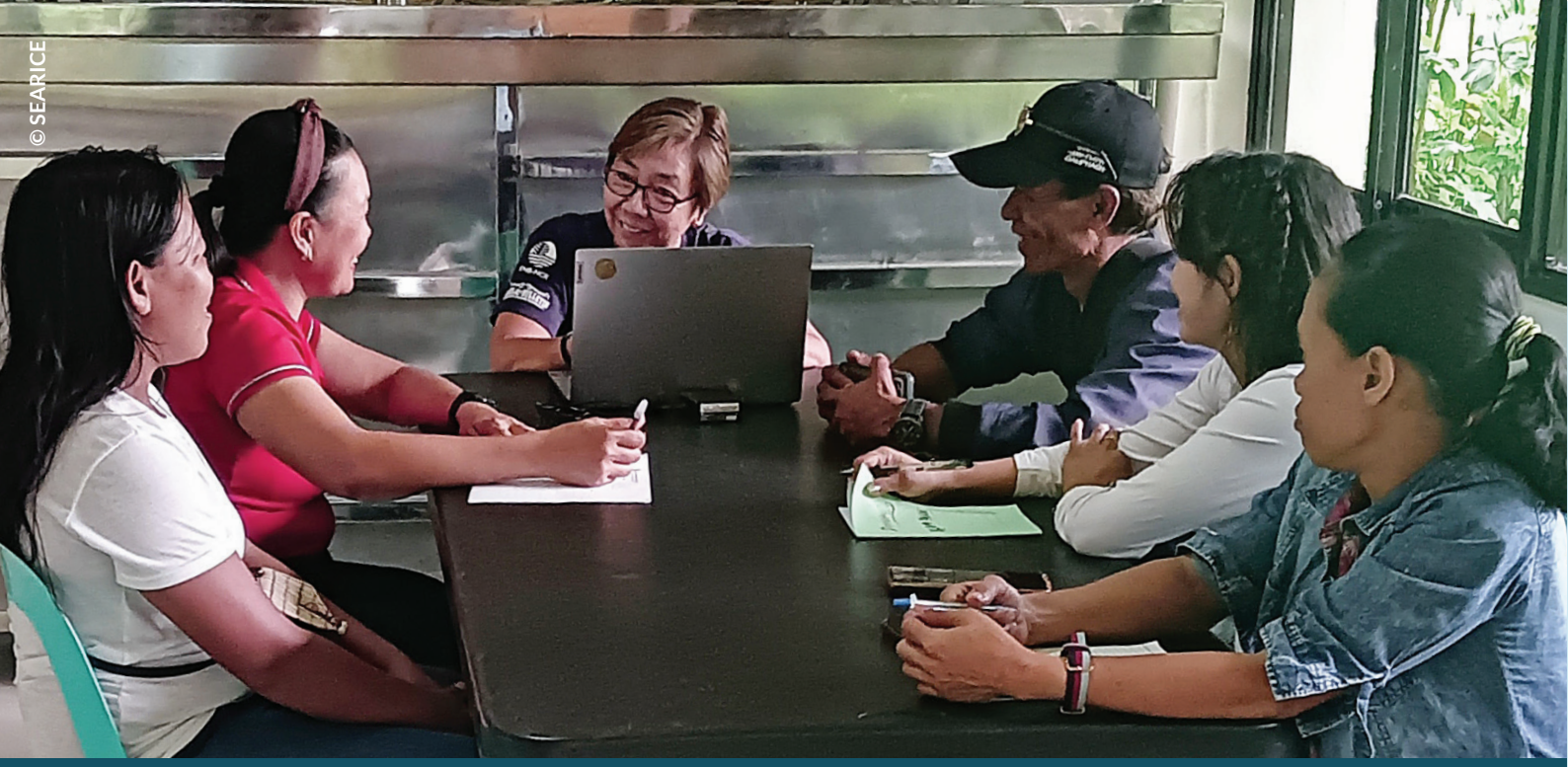


MATERIALS AND METHODOLOGY

Study Sites

The Philippine provinces, and the corresponding cities or municipalities that were integral to the data collection for this study, are as follows:

Luzon

1. Baras, Rizal
2. Infanta, Quezon

Visayas

3. Bago City, Negros Occidental
4. Kabankalan City, Negros Occidental

Mindanao

5. Isulan, Sultan Kudarat
6. Lambayong, Sultan Kudarat
7. President Roxas, North Cotabato
8. Braulio Dujali, Davao del Norte
9. Carmen, Davao del Norte
10. Hagonoy, Davao del Sur
11. Magsaysay, Davao del Sur
12. Matano, Davao del Sur
13. Santa Maria, Davao Occidental
14. Malungon, Sarangani Province

The farms in these locations are considered as "small" based on the World Bank (WB)'s definition of small farm lots as being less than two hectares in size (World Bank, 2003). However, being small is not determined solely by the size of the land, but also refers to the extent of the farm's access to markets and natural resources, and to the degree of commercialization. Considering the important role of small farms in poverty reduction in rural areas, the definition of small farms should ideally be asset- and income-based (Von Braun and Mirzabaev, 2015).

Above photo: Focus group discussion with CATAFA farmers in Negros Occidental

TOTAL NUMBER

9	14	17	42
Provinces	Cities and municipalities combined	LGU participants	Farmer participants

Baras, Rizal
- 3 farmers (including 1 plant breeder)
- 1 agriculture officer

Infanta, Quezon
- 14 farmers
- 2 agriculture officers

Bago City, Negros Occidental
- 2 farmers
- 1 agriculture officer
- 1 environment and natural resource officer

Kabankalan City, Negros Occidental
- 5 farmers
- 1 agriculture officer
- 1 environment and natural resource officer

Braulio Dujali, Davao del Norte
- 1 agriculture officer

Carmen, Davao del Norte
- 1 agriculture officer

Hagonoy, Davao del Sur
- 1 agriculture officer

Magsaysay, Davao del Sur
- 1 agriculture officer

President Roxas, North Cotabato
- 8 farmers

Matano, Davao del Sur
- 1 agriculture officer

Isulan, Sultan Kudarat
- 6 farmers

Santa Maria, Davao Occidental
- 1 agriculture officer

Lambayong, Sultan Kudarat
- 4 farmers
- 1 agriculture officer

Malungon, Sarangani Province
- 1 agriculture officer

Data Collection and Data Analysis

This study is qualitative research. The researchers explored insights on the impact of R.A. 7308 on Filipino smallholder farmers. Primary data were gathered through interviews and focus group discussions (FGDs) conducted by the researchers, while secondary data were derived from peer-reviewed journals, scholarly books, online reports, and online articles published by international organizations.

A set of semi-structured questions was utilized for the interviews with government agency representatives, while for the FGDs with smallholder farmers and local government officials, a set of open-ended and flexible questions was utilized to stimulate discussion.

The interview was used to gain detailed insights from the individual participants and to explore the views and motivations of government-affiliated actors. On the other hand, the FGDs allowed the researchers to investigate local knowledge and to gain a better understanding of R.A. 7308 and its implications, the smallholder farmers' experiences, and social processes that marginalize this specific group of farmers (Leedy and Ormrod, 2002). FGDs generated collective views and the meanings that lie behind those views. In analyzing the data, the researchers read through the data set—including notes from the reading references and the transcripts of the interviews and FGDs—and identified patterns in meaning across the data to derive themes, which are the overarching categories of common data across multiple participants.

Through interviews and focus group discussions, the researchers gained a better understanding of R.A. 7308 and its implications, the smallholder farmers' experiences, and social processes that marginalize this specific group of farmers.

RESULTS AND DISCUSSION

Inadequate Familiarity with the Seed Law

All of the farmers and local government agriculture officers that took part in the FGDs and in the interviews, respectively, were initially asked if they were knowledgeable about, or were at least familiar with, R.A. 7308. SEARICE's farmer partners and a number of LGU officials said that they were well-informed about the law. Meanwhile, none of the farmers who were not engaged in breeding had heard of the law.

In contrast, farmers who did breeding work were aware of the law and its consequences for small farmers—a fact that owes largely to their participation in learning activities conducted by SEARICE. These farmers thought that R.A. 7308 serves the interests of seed companies and business, and that the law neither benefits small farmers nor protects farmers' traditional varieties.

The local government officials who claimed to have some familiarity with the law said that the law seeks to strengthen the seed supply system in the country, thus ensuring a sustainable source of seeds. However, one of the officials interviewed took the view that the law does not work in favor of small farmers and that in fact small farmer-breeders were negatively affected when the law facilitated the spread of hybrid seeds in their municipality. The rest of the local officials had a passing familiarity with the law but were not aware of its details.

Photo above: Focus group discussion with Infanta, Real and General Nakar Quezon farmer representatives.

Agricultural technologists, including a seed inspector from the municipality of Infanta in Quezon province, were familiar with the law. The seed inspector's knowledge of the law, however, was limited to seed-related processes that were being overseen by the National Seed Industry Council (Council). For instance, the seed inspector was aware that the BPI registers seeds and approves their release. Relevant units at the BPI inspect seeds so that varieties can be given a name, included in the list, and evaluated for their characteristics, such as resistance to pests and diseases, grain quality, and eating quality, in addition to their level of yield and maturity.

Diversity of Seed Sources

The farmers, breeders and local officials cited a diversity of seed sources at their level, including the government, traders and the farmers themselves.

Majority of the farmers from the Visayas and Luzon said that they either buy their seeds from traders or receive them for free from the government, specifically the DA and PhilRice. Meanwhile, the breeders from Mindanao said that they also avail of seeds provided by the government but that almost all of them rely on their own self-produced seeds. Local government officials confirmed the diversity of available seed sources but reported that the majority of farmers saved their seeds for the next cropping.

Continuing Practice of Seed Saving and Seed Exchange among Farmers

Except for one, all of the farmers said that they save their seeds for the next cropping in order to cut down on the cost of buying seeds. The practice held true whether or not the farmers engaged in breeding. The local government officials confirmed this practice of seed saving among the farmers in their localities, but added that the farmers also avail of the seeds provided by the government as well as buying seeds occasionally from traders.

Seed saving is done through a well-established sequence of steps:

1. selection on the field;
2. drying the selected seeds under the sun or, in the case of some corn seeds, drying through smoking;
3. storing the seeds in containers like bottles, cans or sacks; and
4. putting the storage containers in storage rooms which may be separate structures or a part of the farmer's house.

The farmers and breeders did not report any sophisticated process of seed saving, nor using any equipment. This indicates that their seed saving practices had either been handed down to them by their parents or had been taught to them in seminars and trainings.

Inconsistent Quality of Certified Seeds from the Government and Private Seed Companies

The farmers said that the seeds sourced from the government and from private seed companies were "sometimes good." However, a large number of them described these seeds negatively, using the terms "low quality," "low germination", "low resistance to pests and diseases", "highly dependent on chemicals", "*alagain*" (a Pilipino word which means that the seeds take a lot of effort to take care of as they are not sturdy), "expensive", and "*damo* failure" (a mix of Ilonggo and English terms which means "many failures" or "frequently failing").

The inconsistent quality of the seeds sourced from the government and from private companies was affirmed by farmer-breeders. However, for a large number of them this is not a persistent problem because they source their seeds from their own self-produced varieties or through exchanges with their fellow farmers.

The local government officials said that the seeds from the government and private companies are of good quality but admitted that these are highly dependent on farm inputs and chemicals to perform well. They also conceded that the seeds are expensive.

Farmer-bred varieties ready for planting

These findings were consistent with the responses to the researchers' question about specific challenges that the farmers have encountered in relation to these seeds. These are as follows:

- Low quality, low germination, low production compared to good seeds;
- Prevalence of pests, diseases following natural calamities, low production;
- Susceptibility to attacks by stem borer, black bug, and other pests;
- Tendency to generate new species of pests;
- High dependence on chemicals; costliness;
- Lack of resistance to adverse weather conditions.

Local Officials' Continuing Endorsement of Certified Seeds Despite Negative Farmer Feedback

Notwithstanding the common observation among farmers that certified seeds are of uneven quality and performance and are unsuited to the areas where they worked, the local officials still believed that certified seeds should continue to be distributed to farmers because these seeds had undergone several tests by experts. The local officials also expressed concern that the traditional farmer-bred seeds, which have not yet been certified under the farmer breeder's name, may be claimed by the seed companies as their own variety.

However, one local official said that the use of certified seeds, particularly hybrid seeds, should not be made mandatory because this would make it difficult for farmers to save these seeds for the next cropping.

Recognition of Farmers' Efforts on Breeding and Conservation of Traditional Varieties

All the farmer-breeders said that their seeds and/or seeds of traditional varieties are not certified according to the usual procedures and under current regulations. The reasons for such include lack of money to pay for the costs of certifying their seeds; the lack of time to undergo this process; and their seeds' ineligibility for certification under the current seed certification system. They were unanimous in wishing that they would be given some form of recognition for their efforts. However, they stopped short of saying how this recognition would be granted.

This supports the view expressed by a government key informant that the current varietal registration and seed certification systems do not recognize the varieties that have been developed by small farmer-

SEARICE transplanting activity in Barangay Kamarahan, President Roxas, Cotabato Province

Staff member of the Municipal Agriculture Office of Arakan, North Cotabato

breeders nor the seeds that the farmers have produced. This key informant added that this is a major gap in the seed industry development program.

Notwithstanding the lack of recognition for their breeding efforts, the small farmer-breeders said that they would continue to breed their own varieties and produce their own seeds in order to sustain their know-how and ability to improve traditional seeds. They said that this gives them some measure of self-satisfaction and reduces their input costs, which results in additional income while contributing to broader goals like food security for the community, enhanced seed security and greater collective ability to cope with climate change.

De-skilling of Agricultural Technologists at the Local Government Level

Local government units (LGUs) expressed the desire for a meeting with civil society groups or non-governmental organizations to determine which agencies are most able or willing to give recognition to the farmers' efforts and products.

When asked if they had programs designed to assist farmers with seed development, the officers from Infanta for example said that they are no longer providing such assistance as they are now more focused on increasing agricultural productivity, such as by providing training on rice production. They added that farmers' organizations have taken the lead in organizing farmers' groups and that they can collectively make requests for government support.

In general, the LGUs' work is limited to receiving and acting on requests for agricultural inputs from farmers' groups and associations. They added that before the Rice Competitiveness Enhancement Fund (RCEF)[2] was implemented, they had

2 The **Rice Competitiveness Enhancement Fund (RCEF)** is a fund created by the Philippine government to improve rice farmers' competitiveness and income in the face of liberalization of the Philippine rice trade policy that lifted quantitative restrictions on rice imports and replaced it with tariffs, among others. The fund has several components, including the RCEF Credit Program, RCEF Extension Program, RCEF Mechanization Program, and RCEF Seed Program.

the capacity to produce 100 bags of seeds. The DA has since taken on this role.

The LGUs said that the RCEF has resulted in an over-reliance among farmers on the government for their seed supply. Their biggest concern is what will happen to the farmers when the program is terminated.

The LGUs thought that the RCEF is not sustainable. They compared themselves to the Department of Social Welfare and Development (DSWD), which distributes assistance to the indigent members of society. They feel that their role has been reduced from capacity-builders to input distributors. How then can they foster sustainability if their roles have been reduced this way, they asked.

Aside from the RCEF, the LGUs have no local programs in their executive-legislative agenda. This is due mostly to lack of funding. A number of LGUs do not know how to assist breeders who have already produced varieties, nor are they familiar with the process of registering varieties and which agency is authorized to issue the registration.

The LGUs in Negros Occidental labor under similar constraints. They do not have seed-related programs that can help farmers, but they do extend technical assistance in terms of seed banking and seed storage. Due to the absence of a concrete program, they are still in the planning stage of establishing a demo program where supplies would be procured by the city and with preference for open pollinated varieties. Their role, so far, is limited to distributing seeds to farmers while PhilRice distributes the seeds to contract growers. The other ways in which they help farmers include giving inputs, capacity-building, mechanization, livelihood programs, and the facilitation of financial assistance. No support is given to farmer breeders who are direct partners of the province.

Manual threshing of harvested rice

The local office of the Department of Environment and Natural Resources (ENRO) in Negros Occidental clarified that the City Agriculture Office is in charge of seedling production for wildlife forests and mangroves propagules collection, while the ENRO is responsible for the production of seedlings of endemic trees and propagules for coastal sites.

The agriculture offices assist farmers through seedling dispersal and the provision of training in market opportunities. At the same time, these offices employ farmer breeders as narra seedling producers. Collectively, these agriculture offices can mobilize the flow of seeds and seedlings with help from the government. They get their supply of seeds from the DA, and to a lesser extent, through LGU-allocated funds for seed procurement.

Sometimes LGU assistance comes in the form of subsidies offering as much as 50 percent discount on fertilizer purchases, distribution of free vegetable seeds and open pollinated seeds of vegetables and corn. They also serve as channels for national programs, like farm-to-market roads, and the Philippine Rural Development Project (PRDP). In the Davao provinces, LGUs give support to farmers through additional income-generating activities and the routine distribution of seeds. Like other provinces, their funding also comes from the government.

More Seed-Related Woes: Privileged Seed Growers, Costliness, and Bureaucracy

A farmer-breeder from the municipality of Baras, in Rizal province, revealed that the DA has a program which grants their seed contract growers exclusive rights to save seeds. Under this arrangement, the contract growers save seeds on a very small scale because if the seeds remain unplanted after six months, the germination would be affected, and the plant would either grow short or not grow at all.

The Baras farmer-breeder also narrated that he once asked the National Seed Quality Control Services (NSQCS) if farmer-breeders could enjoy the same right, and was told that farmer breeders need to become seed growers first so that they could register their seeds.

For the farmers from Infanta, the amount of seeds distributed to them generally depends on the size of their farm lot, but due to the short supply, they usually get less than they should. The seeds that they receive from the government are either hybrid or inbred – the former being too costly. When asked if they are happy with the assistance that they get from the RCEF program, they replied that it is difficult to rely on the government and that this is compounded by the required processes

Land preparation in the municipality of Arakan, North Cotabato Province

which they must undergo. They also said that seeds from the government—which start out as good seeds—have likely undergone several plantings already, and have most likely deteriorated in quality as a result. They also noted that only the seed growers have access to foundation or registered seeds.

One farmer shared an anecdote about shifting from traditional seeds to new seeds because of the Masagana 99 program—an agricultural program of then Philippine President Ferdinand Marcos to increase rice production among Filipino farmers including through the propagation of high-yielding varieties of rice. The farmer said that the government gave them "poison," which caused his father to fall ill. The other farmers added that because of the intensive use of inorganic commercial fertilizers under Masagana 99, the soil of their farm lots had hardened and eventually cracked. They subsequently went back to growing traditional varieties.

In Negros Occidental, the difficulties that farmers experienced with seeds that were bought from companies include stunted growth of plants, low production compared to good seeds, and low resistance to pests, diseases, and unforeseen natural calamities. Several solutions can be implemented to curb these problems, such as reviving the use of heirloom or traditional varieties as well as open pollinated varieties; technical assistance on seed banking; the government putting a stop to the procurement of hybrid varieties and promoting organic and endemic varieties instead; minimizing chemical use; capacitating organic seed growers at the local level; and training farmers to follow organic seed protocols. The other batch of farmers that were engaged in the FGDs suggested that there should be more advocacy-related activities on organic farming, more support for local products, more capacity-building and

mentoring sessions with farmers, and the DA designing adaptable programs for farmers. Like the farmers from Rizal and Quezon, the Davao farmers thought that the seeds from the government are not sufficient for their rice paddies. The company-bought seeds were also regarded as unhealthy, as manifested by their low germination rates, low plant vigor, and the presence of disease among the plants. These farmers called for the monitoring of pests and diseases that could harm the growth of their plants.

These farmers did not demand material rewards. They expressed the need for better dissemination of knowledge on seeds and breeding for the sake of future generations. They hope that in time, they, too, would be recognized for their breeding skills. They want recognition from the government and an acknowledgement that they have the potential to develop their own seeds. Some of them need a more secure and stable source of income. Without more income, they will go hungry, but what is the use of more money if the food supply runs out. They hope that there would be a system for evaluating soils and the type of fertilizers that are safe and effective for their rice fields. Ultimately, what is most rewarding for them is a good harvest. The farmer-breeders said, meanwhile, that they would be encouraged to develop more seed varieties if seed breeding would become recognized as a teachable skill; if they would be given the opportunity to earn additional income; if they could secure more seeds for the future; and if the circumstances surrounding their labor would allow them to remain passionate about what they are doing.

Farmers Field School training in the municipality of Arakan, North Cotabato Province

Challenges and Efforts in Integrating the Informal Seed System with the Formal Seed System

Interviews were conducted with key informants, namely from the BPI, and an academic from the University of the Philippines (UP) at Los Banos, who was part of the various technical working groups under the Seed Industry Development Act as well as a long-time member of the National Seed Industry Council.

According to these informants, R.A. 7308 was supposed to be inclusive of all sectors, including smallholder farmers, especially in the pursuit of the long-term conservation and development of the country's seed supply system. There is in fact a process of enhancing current regulations, particularly the DA Department Circular No. 17, series of 2020[3], which lays down a procedure for the listing of traditional varieties. The technical working group reviewing this regulation is now considering how traditional varieties may be registered under the current seed registration system.

What has happened however is that because of pressures from private commercial breeders, small farmers have not been included in the technical discussions covering the full spectrum of varietal development, including its final application in farmers' fields. The formal seed system pushed by private seed companies and private seed growers has become the exclusive focus of the country's seed system. In fact, the influence of the private sector has resulted in fewer tests of the varieties that have been submitted for registration.

3 Department of Agriculture Department Circular No. 17, series of 2020, Guidelines on the Listing of Traditional Crop Varieties for Conservation and Sustainable Use, 21 December 2020, https://law.upd.edu.ph/wp-content/uploads/2021/05/DA-Department-Circular-No-17-Series-of-2020.pdf

Farmers Field School training in Barangay Kamarahan, President Roxas, Cotabato Province

The companies claim that since they had already invested a lot in developing these varieties, rigorous and repeated varietal testing is no longer necessary for the new varieties to be registered and thereafter released to the market.

This marginalization and lack of involvement of the country's smallholder farmers in the overall process of varietal development will be self-defeating in the long run as this will narrow the genetic base of all seeds in the country and make us all dependent on the seed companies whose goals are economic and do not take into account the broader goal of seed conservation and development.

This argument coincides with SEARICE's long-standing position that the government's seed development program is just an adjunct of its WTO commitments, particularly the government's efforts to amend its PVP Act to conform with UPOV 1991 standards.

This is simply bad policy, because it sacrifices the country's over-all food security and seed security to serve narrow private commercial interests.

The government officials interviewed maintained however that these concerns are being taken into account in the proposed amendments to R.A. 7308. The latter are being prepared for the consideration of the country's legislative body, the Philippine

Woman farmer harvesting string beans in Arakan, North Cotabato

Congress, with the purported goal of putting the informal seed sector on an equal footing with the formal seed system.

One of the items reportedly under discussion is how to give small farmers access to the protected varieties given the prohibitions contained in the PVP Act. This would require harmonizing the country's seed registration system, which was created under a 1992 law, with the PVP Act that was passed in 2002. For example, how would a traditional variety that may be registered under R.A. 7308 be protected under the PVP Act, and what challenges would this pose for farmers?

How would the overall supply of planting materials be enhanced under these

Seed processing training in the municipality of Arakan, North Cotabato Province

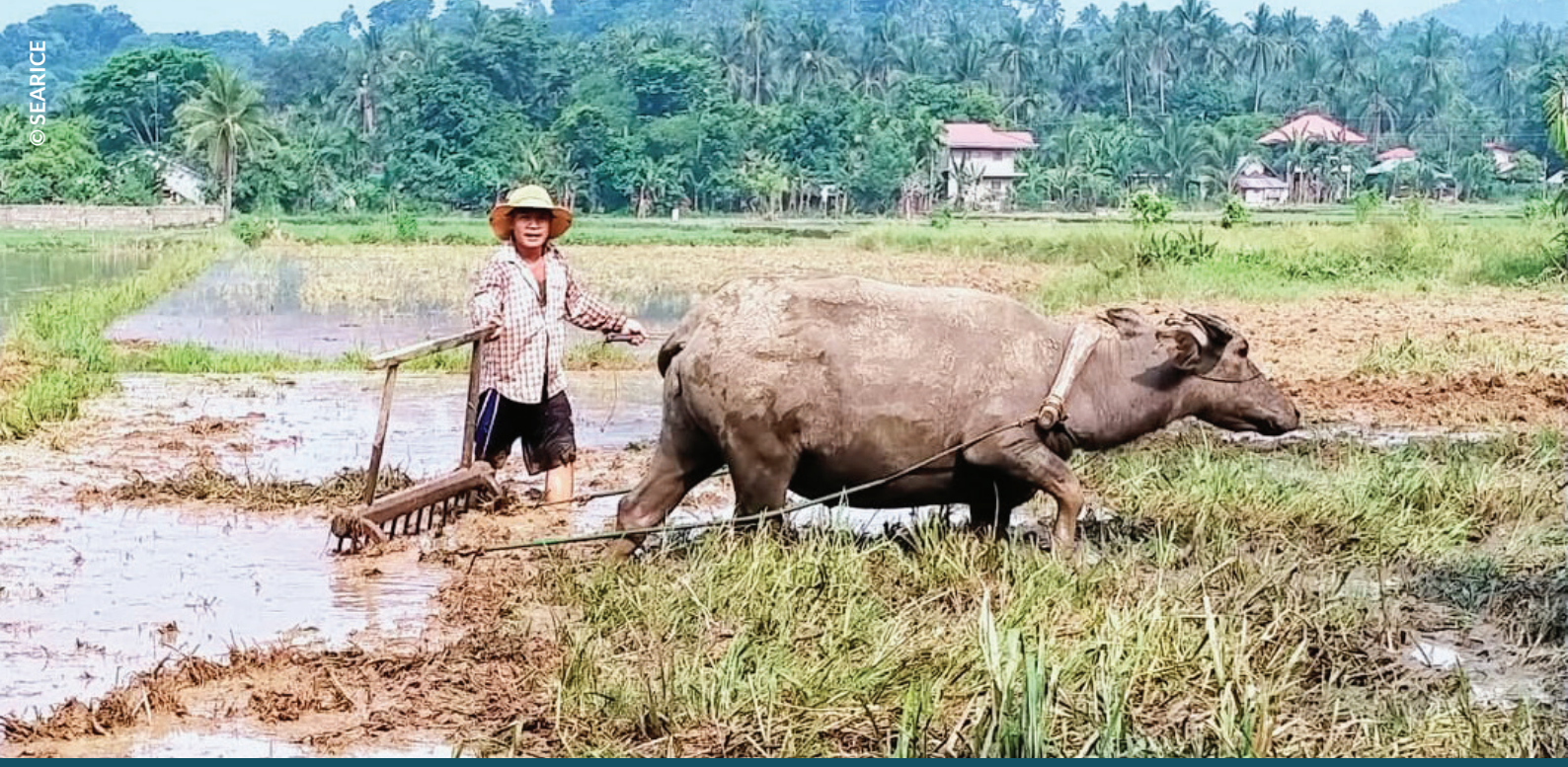
two laws, and would that even result in improvements on the quality of existing varieties protected by these two laws?

SEARICE asserts that attempts to amend the country's PVP law to conform with UPOV 1991 will continue to hamstring efforts to integrate the country's seed registration system with the PVP system. If the government persists in this direction, it might become necessary to establish a stand-alone farmers' seed registration system that is distinct from the formal seed system.

As it is, the implementation of R.A. 7308 is wholly predicated on benefitting the private seed sector. SEARICE calls for a legislative measure that takes into account long-term seed conservation and development, the sustainable functioning of over-all biodiversity and ecosystem services, and the country's ability to cope with the challenges of climate change and its adverse impacts. While SEARICE supports the harmonization of the formal and informal elements of the seed system, SEARICE maintains that the government's preoccupation with integrating the country's seed registration system with the PVP law is a distraction that will not promote the interests of smallholder farmers.

Farmers are not interested in monopolistic ownership of the varieties that they have developed. They do not intend to restrict the use of their varieties but rather to share the results of their innovation with other farmers. Their demand for recognition is not the same as the reward system provided for by PVP. There are many different kinds of reward systems that will not result in restricting farmers' rights to save, use, exchange and sell farm-saved seeds.

Farmers do not intend to restrict the use of their varieties but rather to share the results of their innovation with other farmers.



CONCLUSION

R.A. 7308, was enacted purportedly to promote and accelerate the development of the seed industry in the Philippines, as well as to conserve, preserve and develop the plant genetic resources of the nation. This law was also intended to create a legal framework that would regulate the expanding and increasingly diversifying seed sector for stakeholders engaged in the seed production system.

However, it became immediately clear that the interests of small farmers in the regulation of the Philippines seed system were left out of the letter and the spirit of this law. A reference to "farmers' seed system" is noticeably absent from the law's definition of the Philippines' seed system. This is a serious gap that must be rectified by means of amendments that formally recognize farmers' seed system and acknowledge the inherent interlinkages between the farmers' seed system and the formal seed system. Otherwise, farmers' contribution to building up the current stock of PGRs on which agriculture depends will remain undervalued; their varietal choices dictated by the government and private companies; and their work ever in danger of misappropriation.

Besides being flawed in concept, R.A. 7308's defects are also obvious on the ground. As this study has shown, awareness and knowledge of the law are low if not absent among a number of stakeholders. Farmers who are not engaged in breeding activities are completely unaware of it while the majority of local government officials either have only a superficial knowledge of the law or are unschooled in the law's salient points.

The study showed that local government officials demonstrate a bias for certified seeds notwithstanding the preponderance of negative feedback from farmer users. The farmers' dissatisfaction with these seeds' performance is the reason that they continue to save their traditional seeds and to exchange these with fellow farmers. Obviously, the formal seed system is not meeting the farmers' expectations of high-quality seeds that are also adapted to their areas. This supports SEARICE's argument and advocacy for government support to farmers' seed system and recognition of the complementation between farmers' seed system and the formal seed system.

Running counter to this is the UPOV, which prohibits farmers from saving, exchanging and selling seeds of protected varieties. Were the Philippines to become a UPOV member, it would be obliged to restrict the rights of farmers to save, use, exchange and sell farm-saved seeds as provided for by the ITPGRFA and the UNDROP. SEARICE continues to lobby against the country's UPOV membership and warns of the seed war that is likely to emerge as a result.

The study likewise brought to light small farmer-breeders' desire and need for some form of recognition for their efforts to: (1) develop crop varieties suited to their local conditions; (2) conserve PGRs; (3) improve the performance of traditional varieties; and (4) provide easy access for fellow farmers to locally adapted varieties. Unfortunately, the current seed registration and certification system does not recognize the traditional varieties developed by small farmer-breeders. This is a major gap in R.A. 7308.

In conclusion, this research hopes to sustain critical assessments and discussions of R.A. 7308, and to advocate for its urgent amendment with a view towards fulfilling its stated goal of promoting and accelerating the seed industry's development, but this time with the interests of small farmers at the center. Furthermore, this research is intended to reinforce advocacy for the conservation, preservation and development of the country's PGRs as the cornerstone of the country's agricultural development, food security, and readiness to meet the challenges of climate change.

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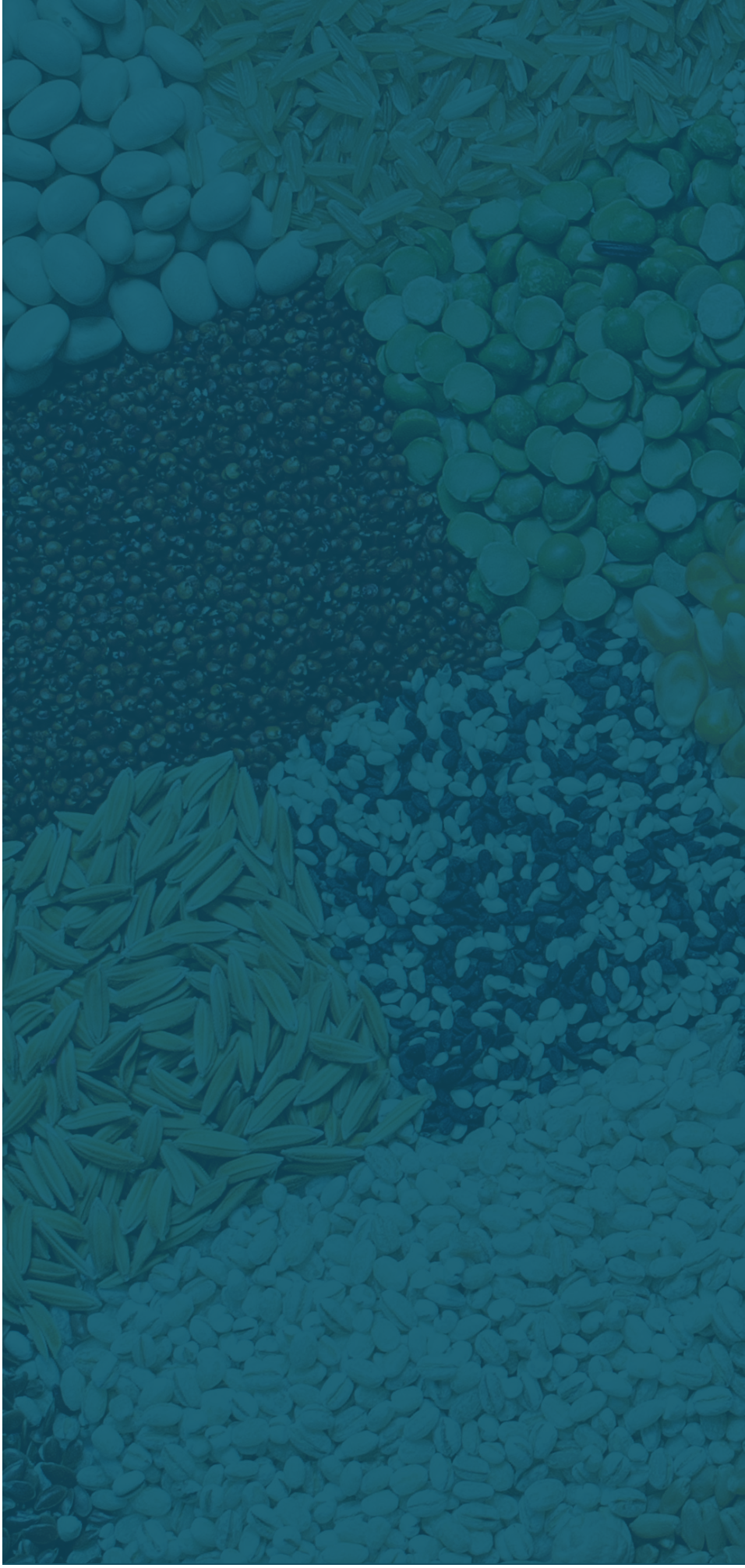
Focus Group Discussion Participants

1. Amaica, Madel
2. Arniel, Allan Itable
3. Ballenas, Marlon
4. Bien, Erlinda
5. Buag, Ricardo
6. Bueron, Butz
7. Cabansag, Danilo Raguindin
8. Camarines, Rosauro
9. Camoni, Linnin
10. Cardiente, Judy
11. Catolico, Armando
12. Cipriano, Angelito Cocal
13. Cordero, Jose
14. De Vera, Benedict
15. Delgado, Evan
16. Deloreto, Cristino
17. Diego, Delfin Nestor
18. Edullantes, Eduardo Sr.
19. Fortu, Glenn
20. Fullante, Angelito
21. Garula, Arnel
22. Gustillo, Gosper Cherry
23. Gustillo, Juanita
24. Hermojenes, Cynthia
25. Ibana, Rosalio
26. Jamias, Rodante
27. Ligutan, Ludina
28. Lumbao, Cesar
29. Magpali, Samuel Sr.
30. Mercado, Reynante
31. Monzada, Meldo
32. Nestor, Diego Delfin
33. Panaligan, Rene
34. Panim, Elsa
35. Pedero, Esther
36. Peralta, Acosta
37. Pojas, Mercedita
38. Repaso, Nelson
39. Samson, Bobby
40. Sanica, Aime
41. Sasi, Eddie
42. Solas, Rona Fe
43. Tabobo, Armiel
44. Tena, Luz
45. Tena, Nestor
46. Vallesteros, Celerino
47. Ybot, Eduardo

Key Informant Interviewees

1. Albasin, Wendell
2. Alcantara, Paul Ryan
3. Aleon, Joel
4. Arangote, Furtunato
5. Areola, Joey
6. Argueza, Jonathan
7. Balance, Marvin John
8. Bongaitan, David Jr.
9. Borromeo, Teresita
10. Briones, Leowin
11. Cabatac, Glicerio Jr.
12. Carampatana, Helen
13. Cresencio, Jun
14. Esmundo, Roel
15. Francia, Carnelo
16. Ignacio, Johnny
17. Mejias, Leonaveth
18. Mesias, Vicente
19. Paclibar, Frieda
20. Quiblatin, Leonia
21. Rotaquio, Manuel Jr.
22. Tadiaman, Ulysses



Southeast Asia Regional Initiatives for Community Empowerment (SEARICE) is a regional non-government organization that promotes sustainable and resilient food systems through ecological agriculture with emphasis on the conservation and development of agricultural biodiversity; and advocates for policies that support, strengthen, and institutionalize community initiatives on sustainable and resilient food systems. It works in partnership with farming communities, local and national government units, civil society organizations, and academic and research institutions in Southeast Asia.

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