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Submission by the African Centre for Biodiversity to The Department of Agriculture, Land Reform and Rural Development

in regard to published

Regulations to Implement the Plant Improvement Act 2018, and the Plant Breeders' Rights Act, 2018

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Summary

The Department has taken important steps to ensure that certain groups of farmers are exempt from these corporate seed laws. This allows for farmer seed systems to operate and, to some degree and indirectly, recognise and protect some elements of farmers' rights.

KEY POINTS

IN REGARDS TO THE REGULATIONS TO IMPLEMENT THE PBR ACT:

⇒ Table 2 of the Regulations outlines the protection periods provided for by the Act under Article 8, of 25 or even 30 years for various crops, which exceeds even the requirements specified by the International Union for the Protection of New Varieties of Plants (UPOV) 1991. The duration of protection should take into account public interest considerations and be substantially shortened.

⇒ Table 2 of the Regulations outlines the sole right period provided for by the Act under Article 9, which is excessive and should be reduced to one year, or in the case of important crops for food and economic security should be set to zero. The current regulation places South Africa, with its high levels of food insecurity, in an incredibly precarious position unnecessarily, for seed that does not fall within the exemption.

⇒ The ACB supports the definitions of categories of farmers, and exemptions being provided for farmers which fall under Regulation 5(2)(a), (b) and (c), i.e. vulnerable household producers, subsistence farmer producers, and smallholder producers.

⇒ The ACB strongly supports the right to save and exchange farm-saved seeds, as articulated in Regulation 5(3)(a). We urge the Department to add the right to sell, as this is already recognised under the definitions of the categories of farmers.

We believe that this exemption should be extended so that farmers within these categories can exchange across exempted categories, and not be confined to exchanging solely within the category they fall under.

Regulation 5(3)(b) is unnecessarily restrictive for those farmers not exempt, and 5(3)(b)(bb) should be removed.

⇒ While the exemptions allow these categories of farmers to freely use protected varieties of some key crops to a relatively high amount, they apply only to an extremely limited selection of crops, as articulated under Regulation 6. We believe that propagation material of protected varieties for all crops should be eligible for exempt farmers. The ACB supports the inclusion of all trees.

⇒ Section 10 (1) (a) of the Act states that a PBR does not extend to acts done for "private and non-commercial purposes", a concept that remains undefined in the Regulations. We suggest the inclusion of a provision to the following effect: "Any acts that comply with Regulation 5 and 6 should be classified as acts done for private and non-commercial purpose".

IN TERMS OF THE REGULATIONS TO IMPLEMENT THE PIA:

⇒ We strongly support the explicit inclusion for household, subsistence and smallholder farmers to continue to produce diverse seeds, as stipulated under Regulation 5(1)(a) and (b), and exempt businesses under Regulation 6(1)(b)[1] and 6(2)(c)(ii).[2]

⇒ According to Regulation 5(2), Table 3 specifies the maximum amount of seed per variety imported or sold by a person on a non-commercial scale, as stipulated in Regulation 5(1).

It is our understanding that farmers' seed may be exchanged and sold without being registered, if not exceeding these quantities of seed sold.

This broad exception is a critically important inclusion in the Regulations, which must be maintained, as this creates the regulatory space for farmer seed systems to function and an important and critical element of farmers' rights namely, the rights to save, reuse, exchange and sell all seed and propagating materials.

As it stands, these regulations offer some degree of regulatory space for the continued existence of farmer seed systems, and the right to reuse, exchange and sell seed, as also set out under Article 9(3) of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), and Article 19 (1)(d) of the United Nations Declaration on the Right of Peasants and People Living in Rural Areas (UNDROP). Yet, there are many elements missing for the full realisation of farmers' rights and the right to seed.

1 Regulation 6 (1) (b) specifies business exempt – which sell seed of non-commercial varieties i.e., those contemplated n section 23(1)(d) of the Act, in accordance with the limitations specified in Table 3, subject to provisions of regulation 5(3)
2 (c) the running of a nursery where: (ii) only plants and propagating material of non-commercial varieties contemplated in 23(1)(d) of the Act and subject to regulation 5(4) are grown and/or sold.

As the orientation of these laws is geared towards commercial seed interests, with small-scale farmers and their seed only dealt with as exceptions, the fundamental needs to support farmer seed systems, ensure the rights and needs of farmers are adequately addressed, and the safeguarding of genetic and agricultural diversity, are absent. This said, the regulatory space provided creates the basis for further work to be done in supporting and developing farmer seed systems and its integration with appropriate food and agriculture systems based on the principles of agroecology.

Introduction

Background

The African Centre for Biodiversity (ACB) has engaged the Department of Agriculture, Forestry and Fisheries (DAFF), now the Department of Agriculture, Land Reform and Rural Development (DALRRD), for many years in regard to the revisions of the 1976 versions of the Plant Improvement (PIA) and Plant Breeders' Rights (PBR) Act, as well as draft Regulations. In this submission, we address DALRRD specifically in regard to the Regulations published in June 2022, to implement the 2018 versions of both Acts that were signed by the President in March 2019.

As we look towards the future, with a rapid decline in biodiversity, including agricultural biodiversity, due to industrial agricultural expansion and its implicit homogenisation, there is an urgent need to transform agricultural practices towards ecologically-sound and socially just practices. This is in line with the draft White paper on Biodiversity Conservation and Sustainable Use as well as international agreements including the Post-2020 Global Biodiversity Framework, and the Convention of Biological Diversity (CBD) more broadly, emphasising the need to facilitate a just transition of agricultural and food systems in the face of climate change.

There is widespread evidence pointing to the unsustainability of global food systems, and the negative impacts created by industrial agriculture and food supply chains, highlighting the need for a radical transformation of these practices (Davies et al., 2022). Seed forms a fundamental element of the food system and our concerns regarding the national and global agricultural and food system and its associated legislation, particularly regarding plant variety protection and marketing and certification seed laws, are well-documented. Our adaptive capacity lies in the hands of smallholder food producers who protect agricultural biodiversity and maintain an intimate relationship with ecological systems.

The ACB has raised specific concerns during the revision of the laws and these are well documented.

IN RELATION TO THE PBR ACT, SOME OF THE KEY CONCERNS INCLUDE:

- ⇒ Significantly expanding the scope and duration of Breeders' Rights;
- ⇒ extending PBRs to cover harvested products derived from unauthorised use of a protected variety;
- ⇒ extending PBRs to cover all crops;
- ⇒ extending PBRs to cover *essentially derived varieties;*
- ⇒ criminalising the exchange and sale of farm-saved seed from protected varieties.

IN RELATION TO THE PIA (WHICH ESSENTIALLY IS SOUTH AFRICA'S SEED LAW) THESE INCLUDE:

- ⇒ The inclusion of all forms of seed exchange under the definition of sale (this is the case in both Acts), the excessive associated penalties, and implications for farmer seed systems;
- ⇒ the use of Distinct, Uniform and Stable (DUS) criteria for legal recognition and listing of a variety, entrenching genetic uniformity and monocultures and thereby restricting the use and trade of heterogenous propagation material, including farmers' seed;
- ⇒ quality controls and certification requirements for seed production being inappropriate for farmer seed;
- ⇒ lack of clarity regarding what constitutes "non-commercial scale" in regard to exceptions.

In many respects, the Regulations respond to and deal with these concerns in that broad exemptions and exceptions for categories of farmers have been provided, based on the quantity of seed produced and traded. This allows for the continued practices of the homestead and small-scale farmers operating at non-commercial scales.

We commend the Department for its efforts in attempting to provide protection to the most vulnerable members of our society, including smallholder farmers. In this submission, therefore, we focus on the sections provided that allows smallholder farmers some regulatory space in order for their seed systems to survive. In this regard, this submission focusses on sections 23(1)(d) and 23(2) of the PIA and sections 10(2)(a) and (b) of the PBR, read together with the draft Regulations 5, 6, and 7 of the PIA and Regulations 5 and 6 of the PBR respectively.

We place on record that nonetheless both the PBR and PIA laws are deeply problematic, as they promote and support industrial agriculture and favour genetic uniformity over agricultural diversity, and private ownership and profit over public goods, in the face of plummeting biodiversity and deepening food insecurity and inequalities in our agriculture and food systems. Industrial agriculture and the corporate-controlled food system are reliant on the uniformity of commercially bred and corporate-owned seeds, including genetically modified seeds, which in turn are reliant on farmers' diverse seed.

Currently, industrial agriculture uses at least 75% of the world's agricultural resources and is a major source of greenhouse gas emissions. Overreliance on mass-produced inorganic fertilisers, land-intensive livestock practices, deforestation and meat-heavy diets have produced immense carbon emissions while undermining local land and food sovereignty.

Furthermore, capitalist and colonialist legacies have enabled a counterproductive food distribution system that starves communities of culturally appropriate, affordable, and nutritious diets. A just transition built upon decentralisation and democratisation of food production, through supporting flourishing farmer-managed seed systems and agroecology, to ensure a just (and nutritious) food system is long overdue.

While the Regulations take a step towards allowing the practices of homestead, traditional and small-scale farmers to continue, they do so only as exceptions and exemptions to the PBR Act and PIA. These exceptions do not constitute legal measures toward descaling industrial agriculture and upscaling agricultural biodiverse, agroecological, regenerative and just agricultural and seed and food systems.

FARMERS' RIGHTS, FARMER SEED SYSTEMS, FARMER SUPPORT - THE REGISTRATION, MULTIPLICATION AND MARKETING OF FARMERS' SEED

The exemptions and exceptions outlined in these Regulations illustrate a critical opening for farmers seed systems in South Africa and to advance the realisation of farmers' rights to save, reuse, exchange and sell seed in South Africa. It must be noted that farmers' rights, as defined by the ITPGRFA under Article 9, goes beyond the right to save, exchange and sell seed, and includes: the recognition of the enormous role played by local and indigenous communities and farmers in the conservation and development of plant genetic resources, which is the basis of food and agricultural production; the protection of relevant traditional knowledge; the right to participate in the benefit sharing of PGRFA; and the right to participate in decision making related to the conservation and sustainable use of PGRFA.

The UNDROP, which South Africa is a major supporter of, refers to the Right to Seed, under Article 19 and includes the above, as well as: the right to maintain, control, protect and develop their own seeds and traditional knowledge; for States to take measures to respect, protect and fulfil the right to seed of peasants and other people working in rural areas; ensure sufficient quality and quantity of seeds are available at the suitable time and affordable price; for States to recognise the right of peasants to rely on their own seeds or locally available seed of choice and to decide on the crops and species they wish to grow; for States to take appropriate measures to support farmer seed systems and promote the use of farmer seed and agrobiodiversity; for States to take appropriate measures to ensure research and development integrate the needs of peasants and other people working in rural areas, to

ensure their active participation in defining research priorities, and in the undertaking of research and development, taking into account their experience, and increase investment in research and development of orphan crops and seed that respond to smallholder farmers; and for States to ensure that seed policies, plant variety protection and other intellectual property laws, certification schemes and seed marketing laws respect and take into account he rights, needs and realities of smallholder farmers. While these Regulations advance farmers' rights in South Africa, some crucial elements are not addressed.

The diversity and dynamism of farmer seed systems fails to be captured, accounted for or accommodated in South African legislation. As is argued by Batur et al (2022), rather than simply as a derogation to conventional seed laws operating within corporate industrial crop production, a specific, tailored regime to recognise the role of farmers as both stewards and developers of biodiversity is important to reflect the complex socio-economic values and diversity of farmer seed systems. This means going beyond a conservationist perspective of farmers' seed to explicitly recognise their role in seed production, agrobiodiversity conservation and in developing plant varieties adapted to local agroecological conditions.

New articulations are required, as we look towards a future that urgently requires local solutions in the face of the myriad of crises at our doorstep, aligned with international obligations of conservation and sustainable use of agrobiodiversity under Article 6, 8 and 10 of the CBD, Articles 5 and 6 of the ITPGRFA, and the realisation of farmers' rights enshrined in Article 9 of the ITPGRFA and Article 19 of the UNDROP.

THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY AND CLIMATE CHANGE ADAPTATION

The UN special rapporteur on the right to food, Michael Fakhri, articulates clearly:

> *Broadly, there are two different types of seed systems: farmers' seed systems and commodity seed systems. Farmers' seed systems are defined by the long-standing continuous renewal of biodiversity and free distribution of seeds and knowledge among peoples. Seeds are gifted, shared, bartered, or bought and sold in informal or formal markets. Farmers' seed systems make food systems more resilient against climate change, pests and pathogens. This is because the more diverse a food system and the more dynamic the global ecosystem, the higher the chance that any one species has a particular trait that enables it to adapt to a changing environment (and in turn, pass that trait along) (Fakhri., 2022, p2).*

He further emphasises the importance of farmer seed systems, as integral to the world's genetic and cultural diversity, being foundational for all food systems, and since humankind relies on plants for food, feed, fibre and a functional ecosystem, nothing less than the *Right to Life* is at stake when farmers' seed systems are challenged or poorly supported. Therefore,

the more a seed system recognises and supports farmers as stewards of a seed system for all of humankind, the more likely this system fulfils people's human rights.

This is also reflected in target 2.5 of the Sustainable Development Goals. Commodity seed systems, in contrast, are dedicated to the reproduction of homogenous varieties dependent on chemical inputs through property regimes and contract law; the main purpose is to make profits and produce as much food as possible. Commodity seed systems rely on farmers' seed systems (and naturally occurring biodiversity) to provide the raw material. In turn, a farmers' seed system depends on the right of farmers to freely save, use, exchange and sell seeds. As a result, when countries buttress commodity seed systems and do not adequately protect and support farmers' seed systems, they destabilise ecosystems and violate people's human rights.

Kliem and Sievers-Glotzbach (2022) examine the role of seed production as part of building socio-ecological and agroecological resilience. While overall farmer seed systems – what they call commons-based seed production – contribute substantially to resilience, yet with less recognition, protection, extension support, training and financing, they lack the ability to maintain and grow. Therefore, public breeding and production programmes are essential to maintain and grow this sector, and thereby ensuring its contribution to national food and nutritional security. The COVID-19 experience offers significant evidence signalling how local systems, with shorter, more direct supply chains, were more reliable than longer, global supply chains (Duguma et al, Worstell, 2020).

It is well known that genetic and agricultural biodiversity are best conserved *in-situ,* i.e. on farm, and in the hands of their custodians – smallholder farmers and farming communities. This also points to the recently released Draft White Paper on Biodiversity Conservation and Sustainable Use – an extremely progressive document, centring justice and the rights of people in biodiversity conservation. It is important that agricultural biodiversity – in the case of crop wild relatives and domesticated species in the hands of farmers – and its relationship with industrial agriculture is unpacked and fully catered for.

Farmer seed networks are generally characterised by an alternative science system, low-input farming techniques, the flow of seeds within a network and are embedded in sociocultural systems, which contribute to the maintenance of evolutionary processes (Biber-Klemm, 2018). Agroecological farmers tend to value and emphasise other criteria over DUS, which also applies to other organic and low-input farmers, who cannot rely on chemical inputs as compared with their conventional counterparts. Historically, seed laws have failed to protect and promote the development of farmer seed systems, or find ways to recognise the collective innovation they represent (Salazar e al., 2007).

Detailed comments

Regulations made in terms of the Plant Breeders' Rights Act, 2018 (Act. 12, of 2018)

4 (1) Duration of a Plant Breeders' Right and the sole right period

The Act provides excessive protection periods of 25 or even 30 years. This will likely hinder innovation rather than promote it. Even in terms of UPOV 1991, the minimum duration of protection is 20 years for crops and 25 years for trees and vines. The proposed protection periods in the draft Regulations exceed those prescribed by UPOV 1991 by 5-10 years. The duration of protection should remain in the public interest and therefore should be substantially shortened.

The sole right period severely restricts the possibility of issuing licenses in the public interest by defining a period during which no compulsory licenses can be issued. The current sole rights outlined in Table 2 are excessive, between 5-10 years. These should be limited to a maximum of one year, and for plants that are important for food security and of medicinal and cultural value, should be set to zero. Even UPOV 1991 members, such as the European Union and Switzerland, do not have such severe restrictions on the granting of compulsory licenses. We wonder why South Africa would want to place such enormous restrictions unnecessarily, and thereby put food security in an even more precarious condition than it is currently in. South Africa should take into account the gross inequalities in the country and develop Regulations accordingly.

5 Exceptions to Plant Breeders' Rights

The exceptions are outlined in the PBR Act under Article 10. Of particular importance for homestead and smallholder farmers are Articles 10(2)(i) and (ii) on the category/ies of farmers who may use the protected variety, and the category/ies of plants that may be used.

Regulation 5 outlines the exceptions to a PBR, and section 10 of the Act. 5(2) outlines the different categories of producers in South Africa, for the purposes of section 10(2)(i). Regulation 5(2) describes categories of farmers for the purposes of section 10(2)(i), reflecting different types of producers in South Africa, as defined under Regulation 5(2).

The ACB supports Regulation 5(3). This said we have a few points to add to improve these.

> **5(3)(a):** First, Regulation (5)(3)(a) should rather provide "who produces **up to** the prescribed maximum quantity…" for clarification purposes. Further to this, it would be more appropriate for this sub-regulation to say, "within **these categories of farmers**", so that farmers may exchange with farmers described in categories (a), (b) and (c), and not be confined to exchanging solely within the category they fall under.

It is crucial that provision be made to allow explicitly for the **sale** of such seed within and between these producer categories, to protect food, nutritional and livelihood security. The categorisation in Regulation 5 (2) already states that these groups sell surplus and make some income from agricultural activities. Therefore, it could be added at the end of the sub-Regulation 5(3) (a) "**…or sells surplus for propagating purposes…**". This will provide legal certainty for the continued traditional activities of smallholder farmers in producing food, conserving and sustainably using biodiversity, and deriving a livelihood, is not prohibited and criminalised, and that seed catering to local needs and interests is available and accessible. This is also in line with the UNDROP.

Regulation 5(3)(b) is unnecessarily restrictive. In the United States[3] as well as in Switzerland (both UPOV 1991 parties) all farmers, including large-scale farmers, do not pay any license fees for farm-saved seeds used on their own farm. Further to this, there are no obligations to communicate pro-actively to the breeder that seeds are saved on farm for future breeding, as is required in sub-regulation (3)(b)(bb). Even in Europe, where certain farmers need to pay license fees for farm-saved seed, there is no obligation to communicate to the breeder proactively the amount of the farm-saved seed. It is the duty of the breeder to enforce its rights. This should be the case in South Africa, and **therefore Regulation 5(3)(b)(bb) should be deleted.**

In addition, Section 10(1)(a) of the Act states that a PBR does not extend to acts done for "private and non-commercial purposes". It would be helpful to define what this means in the Regulations, as currently this remains undefined. Therefore, we suggest the inclusion of: "**Any acts that comply with Regulations 5 and 6 should be classified as acts done for private and non-commercial purpose"**.

6 Categories of plants

The exception applies only to those crops listed in the table under regulation 6, as stated in Regulation 5(4). First, we support the inclusion of all trees in this table. Second, we urge that this also be extended to all other crops, as homestead and smallholder farmers do not pose an economic threat to seed companies.

3 For the US see here: https://www.conservationplace.com/wp-content/uploads/FARMER-SAVED-SEED-Agronomy-News-Article-003.pdf or here https://www.ams.usda.gov/services/plant-variety-protection/pvpo-frequently-asked-questions

The table under Regulation 6 includes 14 agricultural crops and 14 vegetable crops only.[4] Comparing this list to the six-and-a-half-page list of crops governed by the PIA (which is also not an exhaustive list of crops), we are deeply concerned with this enormous restriction placed on small-scale farmers. There is no indication as to what criteria were used to select these crops, with many plants essential for food and nutritional security missing, such as Swiss chard, beetroot, dry beans, lettuce, carrots, kale, garlic, to name a few. We believe that protected varieties of *all crops* should be eligible for reuse by small-scale farmers outlined in Regulation 5(2)(a), (b), and (c). Furthermore, the figures in the table are highly variable. As it stands, the limitations imposed on farmers makes these broad exemptions somewhat meaningless and this is deeply concerning.

There is a spelling error in Table 6 in regard to "Jungo beans" as it should be "Jugo beans". It also appears that the maximum quantity of potatoes referred to is also incorrect and is missing the word "tubers" after 1 500. If not, then we believe this figure is far too low.

We believe the route the Department has taken is important towards responding to the South African dual agricultural realities, and respectfully submit that these comments and the changes proposed would strengthen these laws substantially.

Regulations made in terms of the Plant Improvement Act, 2018 (Act. 12, of 2018)

5 Exemption for plants and propagating material

The exemptions outlined in the PIA under Article 23 are intended to be operationalised by Regulation 5 of the Draft Regulations:

We strongly support the explicit inclusion of household, subsistence and smallholder farmers to continue to produce diverse seeds as stipulated under Regulation 5(1)(a) and (b), and

4 Category A: agricultural crops: Arechis hypogea L..(Groundnut); Avena sativa (Oats); Eleusine corocana (L) Gaerin (finger millet); Glycine max (L) (soy bean); Hellanthus annuus L (sunflower); Pennisetum glausum (L) (Pearl millet); Sorghum bicolor (L) Moench (sorghum); Triticum aestivum L.f (wheat); Triticum turgidum L (=T.durum) (durum wheat); Vigna radiata (L.) Wilczak (Mungbean); Vigna subterranean (L.) Verdo (Jugo beans); Vigna Ungulculata L. Walp (Cowpea); Zea mays L. (conventional white and yellow maize); Zea mays L. var. saccherata (Sturtev) L.H. Balley (Sweet corn).
Category B: Vegetable crops: Allum L. (onion); Brassica oleracea L. (cabbage); Citrullus lanetus (Thunb.) Matsum & Nakai (Watermelon); Colocesia esculenta (L.) Schott (Taro, amadumbe); Cucumus melo L. (sweet melon); Cucurbita maxima Duchesne (Pumpkin); Cucurbita moschata Duchesne (squash, butternut); Cucurbita pepo L. (squash, zucchini, vegetable marrow); Lagebaria siceraria (Molina) Standi. (Calabash); Ipomoea batata (L.) Lam (sweet potato); Solanum lycopersicum L. (tomato); Manihot asculenta Crantz (Cassava); Solanum tuberosum L. (Potato); Phaseolus vulgaris L. (Garden bean)
Category C: Fruit Crops: All species as reflected in the Plant Breeders Rights register maintained in terms of section 4 of the Act.

exempt businesses under Regulation 6(1)(b)[5] and 6(2)(c)(ii),[6] as well as seed banks and or/field gene banks as multiplication/conservation facilities, so they will not be regulated by this Act. Such broad exceptions are critical for South Africa and reflect the realities and needs of a significant portion of the population.

According to Regulation 5(2), Table 3 specifies the maximum amount of seed per variety imported or sold by a person on a non-commercial scale, as stipulated in Regulation 5(1). It is our understanding therefore that farmers' seeds may be exchanged and sold without being registered, if not exceeding these quantities of seed sold. This broad exception is a critically important inclusion in the Regulations, which must be maintained, as this creates the regulatory space for farmer seed systems to function.

When looking at Table 3, which specifies the maximum amount of seed per variety imported or sold by a person on a non-commercial scale indicated in columns 2 and 3, there is some concern. While these figures seem quite satisfactory, there seems to be a lot of variability in terms of quantity of seed sold per year, and quantities of seed per packet – without any explanation as to the rationale behind these numbers. These figures are essentially the same as Table 1 from the Guidelines and Procedures for the Importation of unlisted varieties in terms of the PIA, 1976,[7] with a few minor changes. It is important that it is explicitly stated that these figures relate to non-commercial seed under the revised PIA.

It is not clear why hemp seed, defined as low THC hemp in the Regulations, is not included in the exemptions along with other crops. We would like clarity as to why this is the case.

Chapter IV: Conditions for sale of plants and propagating material

Chapter 4 outlines requirements for trade in seed which is certified and seed which is not certified. Table 4 outlines the requirements for seed to be sold. Table 5 outlines which varieties require certification. Due to the broad exemptions provided for under Regulation 5, this section is not applicable to farmers and/or businesses operating at a non-commercial scale.

5 Regulation 6 (1) (b) specifies business exempt – which sell seed of non-commercial varieties i.e., those contemplated n section 23(1)(d) of the Act, in accordance with the limitations specified in Table 3, subject to provisions of regulation 5(3)
6 (c) the running of a nursery where: (ii) only plants and propagating material of non-commercial varieties contemplated in 23(1)(d) of the Act and subject to regulation 5(4) are grown and/or sold
7 https://www.dalrrd.gov.za/doaDev/sideMenu/plantProduction/doc/GUIDELINES IMPORT UNLISTED VARIETIES_seed _PIA__Dec 2014.pdf

Chapter V: Registration of varieties

Chapter 6 of the Act refers to the registration of varieties for the national variety list. Article 27 of the Act stipulates that only those varieties that are Distinct, Uniform, and Stable (DUS), are eligible for national listing. Chapter 5 of the Regulations relates to the registration of varieties. There has been extensive work done to recognise the value of genetically diverse populations of crop species. We emphasise that while there is value in ensuring the ability for farmers' seed/ varieties to be able to be developed, multiplied, and traded – and to create more resilient food and farming systems – the DUS criteria are incredibly limiting in this regard, and automatically exclude farmers' seed from national listing.[8] While this remains a concern, the broad exemptions provided for under Regulation 5, allows for seed not listed on the National Variety List to be traded on a non-commercial scale.

Strict seed marketing laws prohibit farmer seed systems and the varieties conserved and developed by these systems. They fail to recognise farmers' innovation and the way they manage agrobiodiversity. New thinking is required to go beyond these homogenising criteria that directly increase risk, towards legislation that embraces diversity, conservation and sustainable use, as part and parcel of food production systems, and thereby able to be used within farmer support programmes.

Drawing on recent revisions to the European Union seed marketing rules allows the potential marketing of what is being termed as "organic heterogenous material" (OHM), which is defined as a plant grouping, rather than as a plant variety as defined by UPOV, and explicitly states that these may be the result of "on-farm management practices including selection, establishing or maintaining the material" (i.e., the product of farmer innovation and agrobiodiversity management techniques and the knowledge of all social actors that take part in farmer seed systems).[9] This new regime is being seen as a tool to pave the way for more diverse ad inclusive seed systems, albeit as part of organic certification schemes. It would be prudent for South Africa to develop such thinking beyond only exceptions, in how it relates to the realities in the country.

Conclusion

As it stands these regulations create regulatory space to allow the continued existence of farmer seed systems, and important steps toward the realisation of farmers' rights to save,

[8] The precept of a plant variety is centered around distinctiveness, uniformity, and stability (DUS), which are important criteria for industrial agricultural production focused on yield and productivity, but are fundamentally inadequate for farmers' varieties, both old and new.
[9] European Commission, Regulation 2021/1189, adopted on 7 May 2021

reuse, exchange and sell seed. We commend the Department for taking these initial steps in the right direction. Yet, it does not explicitly create the space to expand the use of genetically diverse seed, strengthen farmer seed systems or realise farmers' rights and the right to seed. The regulatory space provided does however form the basis for further work on supporting and developing farmer seed systems, either as a discrete policy on farmers' rights and farmer seed systems, through farmer support programmes, and as a strategy to adapt to changing economic, climatic and ecological conditions.

There is still a need for specific policies and programmes that actively support smallholder farmers in saving and multiplication of diverse seed. South Africa, as a leader on the continent, has the potential to be even more progressive and reorient policies and resources to go beyond mere exemptions, to shift the policy landscape, for the benefit of all. Fundamentally, this requires the active and informed participation of smallholder food producers in such a process.

References

Batur, F., Bocci, R., and Bartha, b., 2021. Marketing farmers' varieties in Europe: encouraging pathways with missing links for the recognition and support of farmer seed systems. *Agronomy*, 11(11), 2159.

Biber-Klemm, S. 2018. Bio-commons in an industrialised country: A viable option? In *The Commons, Plant Breeding and Agricultural Research*; Routledge: Abingdon, UK.

Davies, A.R., Rut, M., and Feeney, J.K., 2022. Seeds of change? Social practices of urban community seed sharing initiatives for just transitions to sustainability. *Local environment* 27(6), 784-799; IPBES. 2019. Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (Version 1); Benton, T. G., C. Bieg, H. Harwatt, R. Pudasaini, and L. Wellesley. 2021. Food System Impacts on Biodiversity Loss: Three Levers for Food System Transformation in Support of Nature. London: Chatham House.

Duguma, L. A., van Noordwijk, M., Minang, P. A., & Muthee, K., 2021. COVID-19 pandemic and agroecosystem resilience: Early insights for building better futures. Sustainability, 13 (3), 1278.

Fakhri, M., 2022. Seeds, right to life and farmers; rights. Report of the Special Rapporteur on the right to food, UN Human Rights Council 49th session

Kliem, L & Sievers-Glotzbach, S., 2022. Seeds of resilience: the contribution of commons-based plant breeding and seed production to the social-ecological resilience of the agricultural sector. *International Journal of Agricultural Sustainability.* 20(4):595-614

Regine Andersen, 2017. '*Stewardship' or 'ownership'*, in *Routledge Handbook of Agricultural Biodiversity,* Danny Hunter and others, eds. New York, Routledge.

Salazar, R.; Louwaars, N.P.; Visser, B. 2007. Protecting Farmers' New Varieties: New Approaches to Rights on Collective Innovations in Plant Genetic Resources. *World Dev. 35*, 1515–1528

Worstell, J. 2020. Ecological resilience of food systems in response to the COVID-19 crisis. Journal of Agriculture, Food Systems, and Community Development, 9(3), 1–8.