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PO Box 2243, Hillcrest, DURBAN 3650, South Africa Tel: +27(0)31 206 2954 Fax: +27(0)86 546 9196 www.biowatch.org.za

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The Registrar of the Plant Improvement Act
Directorate Plant Production
Department of Agriculture, Forestry and Fisheries
Harvest House
30 Hamilton Street
Arcadia, Pretoria 0001

Submission on the draft Plant Improvement Policy and the Plant Improvement Bill

Thank you for the opportunity to comment on the draft Plant Improvement Policy and Bill.

Our submission follows below and consists of:

- Background on Biowatch South Africa
- Context of Seed Regulations
- Key challenges for South Africa
- Comments on the draft Plant Improvement Policy
- Comments on specific provisions in the Plant Improvement Bill

Yours sincerely

Director

Biowatch South Africa

Biowatch is a non-governmental organisation established in 1997. We strive for social and ecological justice through challenging industrial agriculture and demonstrating ecologically sustainable alternatives. We do this by supporting small-scale farmers, working with civil society to create joint understanding and action, and constructively engaging with government in implementing policies and practices that promote, facilitate and actively support agro-ecology and safeguard people and land. We have a long track record of working on issues concerning seeds and indigenous knowledge systems at both local and international levels.

Context of Seed Regulations

The aim of seed regulations and certification systems is to regulate the seed market in such a way that it will provide reliable, quality seed to farmers and support the breeding of improved varieties. However, seed regulations have evolved to become increasingly restrictive and are now used in tandem with plant breeders' rights to protect the interests of seed companies and private breeders at the expense of agro-biodiversity and the independence of farmers.

The concept of seed 'improvement' through scientific methods and then putting in place legislation that favours and protects those 'improved' seeds has been an important element of the reconfiguration of agriculture and the industrialisation of food production. This focus on producing elite and homogenous varieties, takes seed production out of the hands of farmers and focuses on varieties that can be multiplied exclusively by the breeder, which over time will give commercial breeders and seed producers complete control over the seed system.

Modern varieties and their impact on farmer's varieties and genetic diversity.

Over the past 60 plus years, the focus in agriculture has been on the rapid replacement of the informal seed system with the formal system with its modern varieties. An example of this in Africa and in South Africa can be seen with the focus on maize, a crop that lends itself to hybridisation, which then makes seed saving impossible. The 'maize model' (technology transfer, high inputs, subsidies) has been pushed by research, investment and favourable institutional and policy frameworks.[1] The result is that it has become such a dominant crop that it has replaced not only traditional maize varieties, but also many other crops, reducing diversity in farmers' fields and in people's diets.

The varietal purity and uniformity demanded by seed regulations means that the farmer has to continuously return to a genetic base retained exclusively by the seed-producer. As a result, the process of plant improvement and purification does away with the diversity generated naturally during natural multiplication. Also, the modern varieties are generally

[1]Louwaars. N.P.& De Boef, W.S. 2012. *Integrated Seed Sector Development in Africa: A Conceptual Framework for Creating Coherence Between Practices, Programs and Policies.* Journal of Crop Improvement, 26.p 39-59.

less resilient and only have 'improved' performance if the cultivation environment is also 'improved' with fertiliser, pesticides and irrigation. [2]

Farmers' varieties have been deemed 'non-varieties' and have received almost no research or extension support but have had to compete with modern varieties and hybrids. As a result there has been a massive displacement of farmers' varieties.

Importance of the Informal Seed Sector and PGR conservation activities

Globally it is increasingly recognised that the informal seed system is of critical importance for food security and the conservation and sustainable use of agro-biodiversity. In the second report on the State of the World's Plant Genetic Resources for Food and Agriculture it states: "*many country reports indicated that informal seed systems remain a key element in the maintenance of crop diversity on farm and can account for up to 90% of seed movement*"[3]

Farmers continue to save seed and informal seed systems have survived against all odds. This can be ascribed to the fact that:

- Farmers prefer varieties with specific adaptation to local conditions or with tasting/cooking/storing qualities that cannot be obtained from the formal sector.
- Farmers have limited access to credit to buy expensive modern varieties. Farmers themselves can easily produce seed of an acceptable quality.
- The research system is not putting a high priority on developing genotypes specifically adapted to their production environment.[4]

The informal and formal systems are in constant interchange: seed from the formal seed sector can be reproduced on-farm and exchanged or sold as either grain or seed. Informal seed systems can produce important new varieties for the formal market. Gene banks and conservation activities are sources of new genetic material for the formal breeding sector, while sometimes assisting farmers to recuperate and enhance their own varieties.

It is therefore critically important to consider and determine the impact that seed regulatory systems developed for industrialised, commercial agriculture has had on the informal seed sector, smallholder farmers, conservation and public breeding priorities.

It is also important to keep in mind, that even though it is argued that IPRs and strict seed regulations are important for economic growth and jobs, it is the agriculture system, not the monopolistic and largely foreign-owned seed system that provides this growth and jobs. We need to also remind ourselves that the agriculture sector was thriving before the advent of IPRs and seed regulations and that by far the majority of the world's farmers still manage to farm with farm-saved seeds.

In a report to the United Nations (UN), Olivier de Schutter, the UN Special Rapporteur on the Right to Food highlights the importance of farmers' seed systems and recommends that

[2]BEDE. 2011. *Seeds and Farmers' Rights. How international regulations affect farmer seeds*. www.bede-asso.org

[3]FAO. 2010.*The Second Report on The State of the World's Plant Genetic Resources for Food and Agriculture*.

[4]Louwaars N.P.& De Boef, W.S. 2012. *Integrated Seed Sector Development in Africa: A Conceptual Framework for Creating Coherence Between Practices, Programs and Policies.* Journal of Crop Improvement, 26.p 39-59.

reforming seed regulations are one of the measures governments can adopt to ensure that traditional seed and knowledge systems are kept alive. [5]

Key challenges for South Africa

1. ***The current regulatory system does not fit the diversity of realities on the ground.***

South Africa has a diverse agriculture and a variety of seed and cropping systems and farmers. The current regulatory system is based on the assumption that there is one particular seed system, the formal system. The current draft Plant Improvement Policy and Bill makes passing reference to smallholders and the informal system, where it says: "*It is within this framework that plant improvement activities should be recognized to provide support to strengthen existing commercial production while simultaneously improving the participation of new entrants and facilitating small scale farmers to make the transition to mainstream agriculture"* (page 7 of the draft Policy). The question is: who will then maintain the very important *in situ* agro-biodiversity? This policy approach still does not reflect the realities on the ground nor is it in step with the most recent research that recognises the importance of these informal systems.

A one-size-fits-all regulatory system will not serve the development interests of the country and will favour bigger, foreign-owned companies at the expense of farmers, biodiversity and the local seed industry. The regulatory system should be designed in such a way that it reflect and protect the variation and complexity in agriculture and seed systems.

It is important to differentiate between different cropping systems, uses for crops (food, cash, conservation, export etc.), types of farmers, and the seed systems that support each of these different sectors. Individual farmers also use different seed systems for different crops. The policy challenge is to support these systems while regulating the formal system in a way that protects the farmer and consumer.

2. ***There is a lack of recognition and support for the role of farmers' varieties and traditional knowledge systems***

The important role smallholder farmers continue to play in the conservation and enhancement of Plant Genetic Resources (PGR) is not recognised in national policy or legislation. International instruments such as the Convention on Biodiversity (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) requires that a resolution be found to enhance and protect biodiversity and farmers' rights on the national level. In South Africa there is very poor recognition of the importance of traditional knowledge systems in agriculture and seed systems and no policy framework to protect and enhance these critical systems.

[5] See UN General Assembly Document A/64/170 titled "Seed Policies and the right to food: enhancing agrobiodiversity and encouraging innovation".

The erosion of genetic diversity is a direct result of narrow breeding priorities and commercial interests. The inherent diversity in PGR makes it impossible to apply the strict criteria of the DUS (Distinct, Uniform and Stable) system and still breed for diversity.

3. ***Continued access to Genetic Resources is key for progress in research and development and breeding and conservation by public and private institutions.***

The Plant Improvement Bill (PI Bill) should defend the right of researchers and breeders to have access to protected varieties for research and breeding while ensuring that the contribution of smallholder farmers and traditional communities is recognised.

Participatory Breeding where farmers are supported by scientists and NGOs to enhance their own varieties has been implemented in a number of developing countries and is also something increasingly happening now in South Africa. The current PI Bill should create space for such important breeding and conservation efforts.

There have always been gardeners, hobby farmers and now heirloom seed producers who continue to make important contributions to maintaining old varieties and breeding new, improved varieties through natural methods. These networks of conservation gardeners, farmers and seed networks are growing and should be encouraged to continue and thrive.

4. ***Capacity to administer such a detailed legal system is costly to the taxpayer.***

Policy and legislation must also consider cost-effectiveness and not put in place a registration and certification system with onerous and expensive monitoring and enforcement measures. It must be in line with national and local capacity. It must also be kept in mind that putting in place expensive systems to protect industry means diverting capacity that could be used for other developmental and conservation efforts.

Comments on the Draft Plant Improvement Policy

This draft Policy provides the context for the Plant Improvement Bill. The Policy focus on creating "*a framework for the production and trade of propagation material in order to support government's commitment to food security, job creation and economic development.*". The policy has a number of fundamental and overarching shortcomings, and should be revised to correct these, so that government can fulfil its mandate to the conservation of our genetic resources and to support smallholder farmers.

1. ***The Policy does not make any provisions for the enhancement and protection of agro-biodiversity:***

   Even though it refers to the importance of plant genetic resources and the threat to the world's food security if erosion continues (3.2 in policy document), it makes no further reference to this important aspect in the policy document. The **policy does not provide any guidelines on how to support the conservation of plant genetic**

resources. It is important in the first place to understand and acknowledge that a regulatory system aimed at only supporting the rights of breeders and the international seed industry, undermines and compromises agro-biodiversity, smallholders and public breeding. Then it should **provide legal space for the informal and conservation sectors to thrive**.

The **seed legislation should also support** other commitments by the government, like **the Biodiversity Act and the intention to promote agro-ecology**. Currently there is a draft Agro-ecology policy under discussion. Realising this policy into practice is urgent, given the positive contribution it can make towards mitigating climate change and food sovereignty. Agro-ecological systems are based on access to a diversity of plants and animals and therefore needs access to such varieties.

2. ***The Plant Improvement Policy does not support the realities of smallholder farmers.***

The policy refers to smallholders, but the vision is to assist these farmers to become commercial farmers. This Green Revolution approach to smallholder farmers has failed dismally in Africa and also in South Africa in the Eastern Cape with the government's Massive Food Production Programme (MFPP). Commercialisation for these farmers implies the consolidation of land, credit schemes and high input agriculture, leading in the Eastern Cape rural communities to degradation of land, high debts, loss of own varieties and knowledge and the disruption of community structures.The environmental, financial and social impact has been devastating.[6]

In contrast, there is the work Biowatch has been doing with smallholder farmers in Ingwavuma District, where farmers are supported to revive and enhance their own seed, to use agro-ecology to improve their soil and yields and to build community knowledge and cohesion by working collectively on achieving this.

The Plant Improvement Policy should aim at providing for **a regulatory framework that acknowledges the importance of the informal seed system** and the support that farmers should get to enhance this system and the associated knowledge and agro-biodiversity that it mutually supports. In the absence of any other supportive legislation, it would be better **not to regulate the informal system**. The scope of the law should not extend to farm-saved seed as is suggested in points 5.2, 6.1(i), 6.1.(iv). The law should also not try to introduce the small-scale agriculture sector to certification as the onerous requirements will put an end to innovation in this sector.

3. ***The Plant Improvement policy runs the risk of further undermining Farmers' Rights.***

In the ITPGRFA, the rights of farmers to save, use and exchange their own seed, is specified as an inalienable right. The PBR Bill gives some recognition to this right by including a provision on the so-called 'farmers' privilege'. In 6.1 (i) of the Plant

[6] Hadju F and Jacobson K. 2012. But tractors can't fly. A transdisciplinary analysis of neoliberal agricultural interventions in South Africa. Journal of Transdisciplinary Research. Vol 6. 1. P. 24 – 64 http://www.ijtr.org/Hajdu%20et%20al%20IJTR%20Article%202012.pdf

Improvement Policy, it is proposed that in response, farm-saved seed, should be defined and regulated in such a way that cleaning and processing of farm-saved seed should only take place at facilities that are registered in terms of the Act. It provides for a confusing exception that it could also happen on the farmer's property. And then goes on to say how important it is to regulate this seed in terms of the DUS requirements of the Act. This is an impossible aim and if enforced, will destroy farmers' seed systems. These seed systems simply cannot comply with the rules of the commercial system and if they would, it will destroy the genetic resilience of these systems. We urge the Department to **revise this view, change the policy accordingly and provide the necessary legal space for farmers' seed systems in this Act.**

This section (6.1.iii) also proposes stricter enforcement of the Act. The commercial seed sector is already so dominant and so strong, that it is not clear why the government would expend further resources to regulate on its behalf.

4. ***The Policy does not acknowledge or support public breeding systems or conservation activities.***

Public breeding is more likely than the private sector to base their priorities on those of small-holders and has always played an important role in the improvement of orphan crops, also considered important food security crops. Public breeding institutions and gene banks have the potential to again provide critical services towards food security. It is imperative that government policy acknowledge these important sectors and find ways in the Act to support them. The current emphasis on public-private partnerships for public breeding institutions means that public money is used to support the priorities of the commercial sector and the flow of intellectual capital and genetic resources is a one-way affair. By giving public breeding and conservation activities the legal space to operate without many constraints, a contribution can be made to revive these sectors.

5. ***Harmonisation of seed laws with other SADC countries is problematic.***

The importance of harmonising standards internationally and in SADC is mentioned a few times and is clearly a key objective of this policy. Point 6.5 says: "*By maintaining these international requirements SA will retain its advantage of being an international competitor in the trade of propagating material".* It is imperative that given our history, this should not be done to the detriment of small-holder farmer development and conservation of PGR.

South Africa has been a key driver to harmonise the seed trade laws in SADC and this is a problem for other SADC countries with a radically different agriculture sector where smallholders and the informal sector dominates. It would be very short sighted if South African policy makers would coerce SADC countries to compromise these sectors in their countries to comply with South African standards, as food insecurity in our neighbouring countries will have a profound socio-economic impact on the region. The last sentence in section 6.5 should rather be turned around to read: *The regulation of the South African seed sector should in the process of regional*

harmonisation, make sure it does not compromise seed regulations within other countries in the SADC region.

Comments on specific provisions in the Plant Improvement Bill:

Chapter 1 Application of the Act

1. Section 2 should **exclude/exempt from the scope of the law, plant material intended for and produced by gene banks, community seed banks, networks and organisations working for genetic conservation.** The EU law has this exemption and the aim is to protect smallholder and conservation activities from onerous regulations. The Ethiopian Seed Proclamation also excludes from the scope of the law farm-saved seed, seed for research and forestry purposes. [7]

Chapter 4 Registration of business and premises

2. In a May 2013 workshop held by the Department, it was proposed that gene banks also be listed in Section 8 (1). **We strongly object to including gene banks**, as they are not growing for the market and distribute only minimal quantities of plant material. Conservation varieties in any case would not comply with the DUS criteria.

3. Section 8 says that any (a) cleaner of seed; (b) seller of seed; (d) nursery; must be registered in terms of this Act and comply with the prescribed requirements. As it stands, this Section will include farmers who save seed, exchange seed, sell on a local market, community-based nurseries and seed banks as well as gene banks. **It will therefore be in contradiction with the Plant Breeders' Rights Act who provides an exception for certain categories of farmers, crops and activities, to accommodate small scale and conservation activities. It will also be in contradiction with the Plant Improvement Policy which aims to promote the conservation of genetic diversity. It is very important that this section is only for traders and specifically leaves smallholder farmers, heirloom seed producers, and conservationists outside its scope.**
   Including the exemption as proposed in point 1. above, will deal with this dilemma.

Exemption from registration

4. Section 18 provides a very discretionary possibility for exemption from the Minister or the Registrar to provide an exemption. This is a very vague and very discretionary provision, which could mean anything. It should be specified what the intention of this exemption would be: in national interest; in the interest of plant genetic conservation; in the interest of stimulating local seed industry are all good intentions for such an exemption.

   Registration and certification should only apply to varieties bred through unnatural selection methods, and not to the breeding methods that farmers use.

[7] http://www.farmersrights.org/pdf/Africa/Ethiopia/Ethiopia-seed00.pdf.

Chapter 5 Requirements relating to sale of plants and propagating material:

5. Section 21 specifies that plants sold for purposes of cultivation must be on the National Varietal list. Even though there is a possibility of exemption in section 21 (4), it still means that the smallholder farmers' practice of selling seed in their communities, is illegal, unless the discretionary exemptions by the Minister is granted. This provision is severely limiting to the customary practices of smallholder farmers and should specify that **the exemption in Section 21 should apply to smallholders, heirloom seed producers, conservationists, gene banks.**

   It is imperative that the law should not limit the sale of seed to registered varieties only, as it makes the important conservation and seed-sharing practises of smallholder farmers, heirloom farmers and hobby growers, illegal.

Exemptions regarding certain propagating material.

6. Section 22 does provide some relief from the provisions in Section 21, by providing options for exemptions. We affirm that it is very important to keep section 22(b) specifically.

Chapter 6 National Varietal List

7. Section 23 stipulates the provisions for a National Varietal List, which is based on the DUS (Section 26) and VCU (Section 38) testing criteria. The**DUS criteria are completely inappropriate to farmers' varieties, heirloom varieties and landraces and they should therefore not be required to be on a Varietal Listing**. The DUS criteria are also inappropriate for organic varieties.

   Registration of varieties according to DUS criteria is one of the reasons biodiversity has largely disappeared *in situ*. The law can make an **exception for small operators** below a certain size (for example an R1million turnover and 10 employees), allowing these operators to market varieties that are not listed. A similar provision is currently before the European Union for the EU Seed Directive.

   Section 25 (c) gives the Registrar the right to remove a variety from national listing if it is in the public interest to remove it. This is a good provision and should stay in.

   Genetically Modified Organisms (GMOs) should be on a separate variety list, undergoing DUS and VCU testing separate from its non-GMO equivalent. It should not be automatically come on the Variety list if its non-GMO equivalent is on already.

Chapter 7 Application for National Listing

Disclosure of Origin

8. Section 27 (3) mentions old varieties where the breeder cannot be traced and registration of the variety would require a declaration. There is no prohibition on the use of existing unregistered varieties and no requirement for disclosure of origin mentioned. When applying for national listing in terms of Section 27, **the breeder must also submit disclosure of origin**, i.e. where the variety originates from.

Chapter 13 Inspections

Inspection for quality control and sampling

9. Section 41 describes the inspection procedures, which gives quite extensive rights (and extremely onerous responsibilities) to the Registrar. This provision should only apply to registered businesses and not include any of the exemptions we are proposing. .

Chapter 14 Import and Export of Plants and Propagating Materials

10. Section 42 (2)(i) gives the Registrar the right to allow for the importation of any propagating material which does not conform to any requirements or criteria. This provision opens the door for any kind of imported technology, whether safe or not. It should be much more restrictive and require at least the Advisory Committee to agree.

Chapter 15 Schemes

11. Presumably this section (44) intends to make provision for the informal seed system. However, **for the informal seed system it would be best to remain unregistered and not formalised.** This section on Schemes is very open and broad and our concern is also that it may be used to give preferential treatment to new, untested technologies.

Chapter 17 Advisory Committee

12. Section 48 makes provision for an Advisory Committee with a majority of members representing plant breeders or their agents. Representation should be equal in numbers and it would be more appropriate to also have representatives of smallholder interests. .
    The composition and tasks of the Advisory Committee needs far more thought and this committee should also advise the Minister and the Schemes, not only the Registrar. Regulations (section 53) that are fixed later by the Minister without parliamentary control, and without the Advisory Committee (see Section 47, it advises only the Registrar) will open up the door for lobbying by big seed companies. For example, under section 2 (not even under section 53), the Minister has the right to declare which crops are affected. We recommend that the Advisory Committee advises the Minister on key issues that in particular determines the scope of the law.

    In a number of provisions the Bill is very broad, and these are occasions where decisions still have to be made in the future. The reason given may be technical, but in practice it will mean that in future, smallholders and others will have to lobby each time to defend their interests.

Additional Section for public protection.

The Bill should include an additional section that deals with the public interest, including new technologies like GMOs. It should also deal with transparency in the marketing of seeds, including labelling the origin, IPRs on the seed, whether it is a GMO or developed through any other novel, non-productive technology.

Submission to the National House of Traditional Leaders.

In the memo from the Minister, on page 4, it says that the State Law Advisors say that it is not necessary to refer the Bill to the National House of Traditional Leaders, since it does not contain any provisions to customary law or to the customs of traditional communities. We disagree with this opinion. This Bill has the potential to limit and erode some of the most important practices of traditional communities, i.e. seed saving. It also proposes the regulation of farmers' seed systems, which will directly impact on customary practices of freely saving, exchanging and selling seed.

Conclusion:

Seed Regulations and trade laws have become tools aimed at preventing farmers from producing seeds independently. By evolving into extremely narrow, restrictive and onerous regulating systems, these laws are prescribing uniformity not only in plant varieties but also in farming and cropping systems. Instead of ensuring the genetic superiority that it claims, these laws have led to the erosion of genetic diversity and in the process narrowed down the options for farmers and food security

Neither of these two documents gives the required recognition to the vital contribution of the informal seed sector, public breeding and conservation activities. To do so, it would be best at this point to formally recognise this contribution and ensure that there is adequate legal space for these systems to pursue their activities towards agro-biodiversity.