AN EVALUATION OF THE IRAQI DRAFT LAW ON THE PROTECTION AND EXCHANGE OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

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INTRODUCTION

In Iraq, the Draft Law on the Protection and Exchange of Plant Genetic Resource for Food and Agriculture (DLPEP) is currently awaiting the endorsement of Parliament. The proposed law is expected to set out the framework for systematic provisions of access to both in situ and ex situ plant genetic resources for food and agriculture. The DLPEP, as Article 2 provides, aims at the conservation and sustainable use of plant genetic resources, as well as regulating their exchange for academic purposes, scientific research, training, and plant breeding. Under the proposed legislative framework however, access to, and utilisation of genetic resources other than those of plants, and associated traditional knowledge remain largely unregulated in Iraq.

This paper analyses Iraq’s policy on access and benefit sharing in order to identify shortcomings and options for improvement. Section 2 discusses the definitional ambiguities of plant genetic resources which could have implications on defining the scope of the protection that will be provided. It also looks at the objectives of the Draft Law which provides evidence of the conservation goal in its present form. Section 3 examines relevant provisions on access and their scope. It analyses the three different categories of access to plant genetic resources proposed in the DLPEP: access to the MLS material; access for commercial purposes; and access for scientific research. Farmers’ rights will be discussed in section 4.

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GENETIC RESOURCES AND GENETIC MATERIAL

Over the past few years, The DLPEP has been a subject of discussion in Iraq. It is currently under consideration of the Iraqi parliament and is being discussed by different stakeholders, notably the Ministry of Agriculture. The DLPEP contributes to the implementation of Iraq’s obligations under the ITPGRFA,1 and also covers plant genetic resources that are covered by the Convention on Biological Diversity (CBD) and the Nagoya Protocol (NP).2

The DLPEP defines genetic material and genetic resources as ‘living genetic material of plant origin’.3 4 The definition is however, ambiguous as it does not draw a clear distinction between genetic resources and genetic material. This is in part due to translation problems and the technical language of the protected subject matter. It is important to mention that plants are also defined in the Iraqi Agriculture Quarantine Act (76/2012) whose Article 1 defines plants as ‘living plants or parts thereof, including seed or plant genetic material’.

Looking at the above definition, the term ‘genetic material’ has been preceded by the word ‘living’, and this may make the scope of protection narrow. A broad

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1 Iraq became a contracting party on 27 November 2014 to the International Treaty on Plant Genetic Resources for Food and Agriculture, Rome, 3 November 2001, 2400 UNTS 303 [hereafter ITPGRFA].
2 Iraq acceded on 26 October 2009 to the Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, 1760 UNTS 79 [hereafter CBD]. Various steps have been taken in implementation of the country’s obligations under the Convention. These include the preparation of a national report to the CBD, the development of a national biodiversity strategy and action plans, and the initiation of designated protected areas. The Iraqi National Biodiversity Strategy and Action Plan (NBSAP) forms an important strategy for the implementation of the CBD and functions as an overall framework for the conservation of biodiversity in the country. The Fourth National Report to the Convention on Biological Diversity (the first for Iraq) sets out a framework for materializing the vision of the NBSAP into practical actions to ensure effective conservation and sustainable utilisation of the country’s biological resources. The Fifth National Report on Biodiversity (March 2014) underscores that legislative, institutional and financial rehabilitation are needed on an equal basis. See Iraqi Ministry of Environment, Fourth National Report to the Convention on Biological Diversity (Ministry of Environment, Iraq 2010) 19. Iraqi Ministry of Environment, Fifth National Report on Biodiversity’ (Ministry of Environment, Iraq 2014) 1, 17.
3 Draft Law on the Protection and Exchange of Plant Genetic Resources for Food and Agriculture, art 1 [hereafter DLPEP]. Note that the original text is in Arabic and all translations are the author’s own.
4 DLPEP (n 3) art 1.
definition of plant genetic resources covers any material of plant origin that contains genetic information of actual or potential value. In fact, genetic resources do not necessarily refer to the full organism, such as a plant, genetic resources may refer to a cell, tissue or a character or the genetic makeup with physiological characteristics which are rare and can be transferred from one object to another. According to Article 2 of the ITPGRFA, plant genetic material means ’any material of plant origin, including reproductive and vegetative propagating material, containing functional units of heredity’. The element of functional units of heredity in the definition of genetic resources entails, however, that some biological products such as gene sequences which are genetic parts and components, are not protected.

Finally, while the ITPGRFA explicitly refers to the scientific and socio-economic value of genetic material, the qualifying element of the concept ‘genetic resources’ that is not defined in the DLPEP is the specification that genetic material is of socio-economic value.

2.1 Derivatives

The proposed law extends the definition of derivatives to include, in addition to naturally occurring compounds, products that can be developed through the use of plant genetic resources and their genetic composition such as plant varieties and other similar products. The DLPEP defines derivatives 'اﻟﻤﺸﺘﻘﺎت' as ‘products which are developed or extracted from plant genetic resources obtained in accordance with this law’. As such, the draft extends the definition of derivatives to include, in addition to naturally occurring compounds, products that can be developed through using plant genetic resources and their genetic composition. Derivatives, however, are not defined in the ITPGRFA, which indeed does not address access to these resources and their utilisation. The NP defines derivatives, but the definition covers only naturally occurring biochemical compounds. It defines derivatives in Article 2(e) as ‘a naturally occurring biochemical compound resulting from the genetic expression or metabolism of biological or genetic resources, even if it does not contain functional units of heredity’.

2.2 Is it all about Access?

The proposed law aims at the protection, conservation, and the regulation of the exchange of plant genetic resources for scientific research and training, and plant breeding. It also aims to ensure fair sharing of the benefits arising out of the utilisation of plant genetic resources. According to Article 9(d), it is confirmed that benefits arising from the utilisation of plant genetic resources shall be directed to the conservation of these resources. The link between the conservation and benefit sharing objectives is seen as important because fair and equitable benefit-sharing in itself does not necessarily mean contributing towards the conservation of crop biodiversity. The NP has recently addressed this issue in Article 9, which encourages contracting parties to take measures to ensure that benefits arising out of the utilisation of genetic resources are directed towards the conservation and sustainable use of biodiversity.

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5. ITPGRFA (n 1) art 2.
7. According to Article 2 of the CBD (n 2), genetic resources refer to ‘genetic material of actual or potential value’, and in its turn genetic material is defined as ‘any genetic material of plant, animal, microbial or other origin containing functional units of heredity’.
8. ITPGRFA (n 1) art 2.
9. DLPEP (n 3) art 1.
11 Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, Nagoya, 29 October 2010, UN Doc. UNEP/CBD/COP/DEC/X/1, art 2(e).
12 DLPEP (n 3) art 2.1.
13 DLPEP (n 3) art 2.6.
14 DLPEP (n 3) art 12(d).
16 Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, Nagoya, 29 October 2010, UN Doc. UNEP/CBD/COP/DEC/X/1, art 9.
However, it can be observed that the objective of conservation of plant genetic resources is not present in the operative sections of the DLPEP except in Article 2 and in reference to the duty of the Plant Genetic Resources Unit to cooperate with concerned entities in the implementation of the conservation and sustainable utilisation provisions. But the language of Article 2(a) suggests that it only allows the development of new genetic compositions for commercial purposes. It provides that the law aims at ‘facilitating access to plant genetic resources for academic and scientific purposes, and the utilisation of these resources to develop genetic compositions for commercial purposes’.17

In addition, the proposed law aims to regulate access to plant genetic resources, and their transfer outside the country.18 It could be argued that the utilisation of genetic material of accessed crops may not require the transfer of these resources outside Iraq as it is possible to conduct the research inside the country. It will encourage domestic research and help human resource development.19 To conclude, conducting such research in Iraq is important to combat biopiracy and to facilitate the transfer of conservation technology and its corresponding knowhow to Iraq.

3 GRANTING ACCESS

Articles 8 and 9 of the proposed law constitute the core provisions on access, according to which access to plant genetic resources could be put to commercial or non-commercial uses. Three different categories of access to plant genetic resources have been set down by the DLPEP; access to the MLS material; access for commercial purposes; and access for scientific research purposes.20 In doing so, the proposed law distinguishes between access situations on the basis of the purpose of access and sets different provisions for each access situation.

3.1 Access to Plant Genetic Resources of the MLS

The proposed law provides that access to plant genetic resources of Annex 1 to the ITPGRFA shall be through the Multilateral System (MLS), and the sharing of the benefits arising from their utilisation will be in accordance with the provisions of the ITPGRFA.21 It provides that other non-food related industrial uses, such as chemical and pharmaceutical uses, are excluded.22

According to Article 11.2 of the ITPGRFA, the MLS covers plant genetic resources for food and agriculture listed in Annex 1 to the Treaty which are under the management and control of contracting parties and in the public domain. Correa’s analysis of the concept ‘management and control’ suggests that the word ‘management’ refers to ‘the actual handling’ of Annex 1 plant genetic resources and not to the legal status of these resources.23 The term ‘management’ means the capacity of a contracting party to carry out acts of conservation and utilisation directly or indirectly through a third party.24 This explains the reason why Article 11.2 of the ITPGRFA deliberately introduced or added the word ‘control’, which is a legal qualification.

Therefore, the interpretation of the management and control requirement may become difficult in Iraq as it is a federal state. The decentralised governance in Iraq, created by the new political system of 2003, represents a dramatic shift, especially for those state agencies with

17 DLPEP (n 3) art 2(a).
18 The aims of DLPEP (n 3) art 2 include the regulation of access to plant genetic resources, and the transfer of these resources outside Iraq.
20 DLPEP (n 3) art 8.2.
21 DLPEP (n 3) art 9.1(a).
22 DLPEP (n 3) art 9.1(b).
24 Ibid.
no previous experience of decentralisation. For instance, the 2005 Constitution of Iraq vests authority in the federal, regional and governorate governments, and grants significant authority to regional and local governments without specifying the way that the different levels of government should work with each other to achieve the established aims. In addressing the distribution of authority between the federal government and regional and governorate governments, Article 115 of the 2005 Constitution states that all powers that are not assigned exclusively to the central government are retained by the regional governments. Thus, it is argued that the 2005 Constitution creates confusion with respect to the management of natural resources and their revenue.

Practically speaking, focusing on plant genetic resources, the gene bank in Abu Gharib is part of the plant genetic resources unit of the Federal Ministry of Agriculture. Thus, its collections, which include 3000 accessions, some of them collected in 1977, are deemed to be automatically included in the MLS. The Ministry of Agriculture has begun documenting plant genetic resources, and the number of crop gene banks in Baghdad has continued to grow. Plant genetic resources of Annex 1 in the Kurdistan region, including those in ex situ conditions, appear prima facie to not be covered, and the inclusion of these collections would need to be carried out with the consent of the entities concerned, as stated in the ITPGRFA.

The second criterion for the inclusion in the MLS is that plant genetic resources for food and agriculture of Annex 1 must be in the public domain. The term ‘public domain’ is defined as a legal qualification referring either to public property (i.e. things that belong to the public and are dedicated to their use), or according to intellectual property law, to plant genetic resources that are not protected by intellectual property rights. In the contemporary state of Iraq, the concept of ‘public domain’ has a wider ambit when interpreted under administrative law. Over a decade ago, exactly until the 2003 invasion of Iraq, the Interim Constitution of 1970 prohibited claiming private property rights over natural resources. Article 13 of the Interim Constitution stated that ‘natural resources and basic means of productions are owned by the people’. However, the 2005 Constitution does not address the legal status of natural resources except for oil.

While the proposed law recognises state property rights over plant genetic resources, it does not prohibit claiming intellectual property rights over the MLS material under the ITPGRFA. This would mean that crop genetic resources received from Iraq in accordance with the MLS can be claimed via intellectual property rights even if they have not been modified in any way. The ITPGRFA and the SMTA however, ban the claiming of intellectual property rights on material accessed in the form received from the MLS.

### 3.2 Access for Scientific Research Purposes

The proposed law regulates access to plant genetic resources for scientific research providing that access to plant genetic resources is permitted for academic, scientific, and educational purposes, or for plant genetic resources breeding. In setting the provisions for access to plant genetic resources for scientific research

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26 Similarly, Constitution of Iraq, 2005, art 121 assigns the regional government the right to exercise executive, legislative, and judicial powers in accordance with this Constitution, except for those authorities stipulated in the exclusive authorities of the federal government. Ibid.

27 Constitution of Iraq, 2005, art 115 states: All powers not stipulated in the exclusive powers of the federal government belong to the authorities of the regions and governments that are not organized in a region. With regard to other powers shared between federal government and the regional government, priority shall be given to the law of the regions and governorates not organized in a region in case of dispute.

28 A clear manifestation of this complex legal situation is the oil dispute between the Iraqi central government and the Kurdistan Regional Government. Al Moumin (n 25) 421.

29 ITPGRFA (n 1) art 11.2.


31 DLPEP (n 3) art 9.1(a).
parties create conditions to promote research which contributes to the conservation and sustainable use of biodiversity, particularly in developing countries, to set simplified measures on access for non-commercial research purposes, taking into account the need to address a change of intent for such research.\(^{38}\)

Besides, the language of Article 9.2 suggests that the Draft Law does not distinguish between access to plant genetic resources and their transfer. The DLPEP provides that access for commercial purposes requires the applicant to sign a material transfer agreement without any reference to procedures of prior informed consent (PIC) or mutually agreed terms (MAT).\(^{39}\)

### 3.3 Access for Commercial Purposes

The third category in the Draft Law is access to plant genetic resources for commercial uses. The DLPEP permits access to plant genetic resources for commercial uses, but it excludes the MLS material of Annex 1 from its scope.\(^{33}\) The word “commercial” is critical to the way the Draft Law restricts access to plant genetic resources. The DLPEP does not define the term ‘commercial use’. Commercial utilisation of genetic resources is defined by the CBD as “research activities that explore the commercial potential of bioresources or associated traditional knowledge”.\(^{34}\)

However, there are cases where it is difficult to draw a clear distinction between commercial and non-commercial uses of plant genetic resources.\(^{35}\) It is argued that private and public research institutions may engage in both commercial and non-commercial research. And they normally use similar research methods and processes that may contribute to biodiversity conservation.\(^{36}\) Greiber et al maintain that the intent and not the form of the research undertaken determines whether the research is commercial or non-commercial.\(^{37}\) Article 8(a) of the NP requires that state parties create conditions to promote research which contributes to the conservation and sustainable use of biodiversity, particularly in developing countries, to set simplified measures on access for non-commercial research purposes, taking into account the need to address a change of intent for such research.\(^{38}\)

### 4 SCOPE OF ACCESS AND BENEFIT SHARING

One of the key characteristics of the Draft Law is its broad scope in covering plant genetic resources that are subject to the CBD, NP and ITPGRFA. Article 3(a) of the Draft Law makes it clear that the provisions of the law apply to all plant genetic resources within the limits of the territory of Iraq and its territorial waters, as well as to plant genetic resources that have been acquired in accordance with international law.

Although derivatives are defined in the proposed law in Article 1, derivatives are not mentioned in Article 3 in the scope of the draft which explicitly provides that the provisions of this law apply to all plant genetic resources within the limits of the territory of Iraq and its territorial waters, as well as to plant genetic resources that have been acquired in accordance with international law.

Greiber et al (n 15) 34.

32 DLPEP (n 3) art 9.2(a).
33 DLPEP (n 3) art 9.
34 Secretariat of the Convention on Biological Diversity, Uses of Genetic Resources (2010) 1, 2.
35 Greiber et al (n 15) 119.
36 Ibid 119.
37 Ibid 17.
38 Ibid 119.
39 DLPEP (n 3) art 9.2(b).
40 Greiber et al (n 15) 34.
The proposed law, while defining its own scope refers to traditional knowledge. It provides that the law applies to ‘plant genetic resources for food and agriculture … and any information related to these resources’. The phrase ‘information related to these resources’ can be interpreted as referring to traditional knowledge, considering that the DLPEP recognises farmers’ rights to participate in making decisions on matters related to the conservation and sustainable management of PGRFA.

Besides, the potential benefits under the Draft Law are expected to be limited as the law will be in implementation of the ITPGRFA, under which the facilitation of access to plant genetic resources is a major benefit of the MLS. The draft also regulates access to plant genetic resources that are covered by the CBD and its protocol, but access under either entails bilateral negotiations in order to determine benefits, including the benefits to be shared with the provider.

Finally, although Iraq is a federal state, decentralisation principles find no place in the draft’s provisions. The DLPEP is expected to be implemented at three functional levels: federal, regional and local. A three-tier institutional structure should be envisaged in the law. In order to implement these provisions, a federal information system needs to be set up. Its functions should be the compilation of information on issues related to the genetic diversity of the country. The implementation of the ITPGRFA with regard to access to crop species covered by the MLS requires these resources to be under the management and control of the governments of the contracting parties, and this involves issues that are not easy to determine.

5 PROPERTY CLAIMS TO PLANT GENETIC RESOURCES

The proposed law recognises state property rights to plant genetic resources and associated traditional knowledge. Article 3(c) of the Draft Law explicitly provides that plant genetic resources and all related information belong to the state. State property rights, also known as public property, are defined as property which is in turn owned by all, but with the state having control over access and utilisation. However, state property rights over plant genetic resources have no basis in the CBD and ITPGRFA, as they both make it clear that plant genetic resources are subject to the principle of state sovereignty. Under the CBD and its Protocol, it is intended that parties exercise more stricter application of their sovereign rights over their biological resources, in a way that a provider country has the right to oversee access to genetic resources and associated traditional knowledge and the power to negotiate and agree on access conditions with potential users.

Under Iraqi law, the possible application of state property rights over plant genetic resources may not be practical comparing to the principle of state sovereignty. According to Correa, state sovereignty is about the power and jurisdiction of states “to establish how the resources and assets (tangible and intangible) existing in its territory are distributed, used and eventually subject to property rights”. Although recognising public property over genetic resources is in line with the social and political conceptions of property

41 DLPEP (n 3) art 3.1.
42 DLPEP (n 3) art 6(b)5.
43 DLPEP (n 3) art 3.
47 Carlos Correa, ‘Sovereign and Property Rights over Plant Genetic Resources’ (Background Study Paper No.2, Commission on Plant Genetic Resources, Rome 7-11 November 1994) 2.
rights in the country, Iraq’s freedom to legislate is subject to its obligations under international law. Practically speaking, the establishment of property rights over genetic resources is limited by the intangible nature of its genetic components (their DNA, RNA, gene, and genotype information). These limitations to the proposed legislative framework need to be addressed by future studies.

5.1 Iraqi Farmers: Less or more Rights

The proposed law recognises the right of Iraqi farmers to participate in decision-making in issues related to the conservation of plant genetic resources in their areas, and their right to share benefits arising out of the transfer of these resources. However, the proposed law does not address the customary rights of farmers to use, save, exchange and sell farm saved seeds and propagating material. Its Article 7(a) provides that the state shall ensure and protect farmers’ rights with regard to plant genetic resources. This means that core of farmers’ rights such as their rights to access seeds are subjected to the discretions of the competent authority. The right to save, use, and exchange farm saved seeds in Iraq has to be seen in the context of seed production where most seeds come from farmers’ reserves, while the public sector has been able to fulfil only 4 per cent of the country’s demand for improved seeds since 2003.

It can be argued that farmers’ rights, if adopted as proposed in the DLPEP, will provide little or no protection to Iraqi farmers. Article 7 of the DLPEP does not protect farmers’ rights to use, save and exchange farm saved seeds, even though the ITPGRFA does not exclude the possibility of recognising such rights in the national laws of contracting parties. It establishes that ‘[n]othing in this Article shall be interpreted to limit any rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material, subject to national law and as appropriate.’ Also, it is unclear why the DLPEP links farmers’ rights to share the benefits of plant genetic resources to the transfer of these resources, as potential users may or may not need to transfer the accessed genetic material outside Iraq.

5.2 Other Entitlements Concerning Plant Genetic Resources

In Iraq, agriculture was excluded from being protected by intellectual property rights, and currently there exists no legal system for the protection of plant varieties. The 1970 Interim Constitution of Iraq banned private ownership of natural resources. Intellectual property rights in agriculture arose with the policy changes that followed the invasion of the country where strong protection for plant varieties was introduced, and the patenting of plant genetic resources and enabling technologies was permitted. This was combined with the setting new standards on enforcing intellectual property rights, consisting of civil, administrative and criminal procedures. Thus, one might ask how far farmers’ rights are taken into consideration under the condition of private property rights. It can be argued that options adopted by the proposed law to protect farmers’ rights are limited due to the broad protection of plant patents and plant breeders’ rights in Iraq. For instance, the scope of patentable subject matter can be considered as significantly broad to include plants and animals, while biological processes for their production are not excluded under Order 81 from the scope of patentability. Order 81 allows the patentability of plants, inventions directed to plants (such as plant products, plant cells and genes) and plant varieties. Article 2 of Order 81 defines the scope of patent protection providing that all inventions in all fields of technology that are industrially applicable, novel and involve an inventive step, are patentable. Also, Article 1.4 of Order 81 defines an invention as ‘…any innovative idea, in any of the fields of technology, which relates to a product or a manufacturing process, or both, and practically solves a specific problem in any of those fields’.

48 DLPEP (n 3) art 7(b).
49 DLPEP (n 3) art 7(a).
52 ITPGRFA (n 1) art 9(2).
53 DLPEP (n 3) art 7(b).
56 Ibid art 1.4.
The recent legislative developments in Iraq will effectively mean that complex allocation of rights over plant genetic resources could cause conflicts of interest and thereby affect access to these resources. The proposed law recognises plant genetic resources as state property rights, and also acknowledges farmers’ rights to these resources. However, simultaneously exclusionary intellectual property rights may be taken out on plant genetic resources in accordance with the provisions of Order 81. There are doubts about the extent to which such conflicting interests would contribute to sustainable agriculture and food security in Iraq.

CONCLUSION

This paper has analysed key aspects of the DLPEP, including the coverage of the proposed law, access and benefit sharing provisions, implementation agencies, and the different entitlements established in the draft.

The broad scope of the DLPEP is no doubt difficult to implement within the current technological, institutional and legal capacities of Iraq. While the law is intended for the implementation of the ITPGRFA, its scope of application covers access to plant genetic resources subject to the CBD and to the NP.

57 DLPEP (n 3) art 3.
In fact, it cannot be overlooked that the legislator of the DLPEP became embroiled in a challenging area of law and that the draft provisions barely address the various difficulties and implications involved. For instance, the definition of plant genetic resources and genetic material in the DLPP is imprecise. Article 1 of the draft does not distinguish between genetic resources and genetic material, as it offers one definition for both terms. This could cause confusion when applying the law. Moreover, although the practices of farming and rural communities reflect a rich agricultural heritage, the DLPEP neither defines traditional knowledge nor protects such knowledge. Iraq is a centre of agrobiodiversity with rich agricultural heritage.

The implementation of the ITPGRFA requires considering policy issues relating to food security and sustainable agriculture. This consideration should also focus on their coherence and the mutual support with the CBD and NP. On this basis, once the DLPEP is adopted and entered into force, what has been considered a public good in Iraq since the earliest times will be divided up into different property rights and will become the subject of claims of conflicting interests. In particular, the DLPEP does not prohibit claims to intellectual property rights over plant genetic resources accessed for the purposes of the MLS, and for commercial purposes.