MEMORANDUM OF UNDERSTANDING

BETWEEN

INSTITUTE OF FOOD CROPS YUNNAN ACADEMY OF AGRICULTURAL SCIENCES, CHINA

AND

NATIONAL AGRICULTURE FORESTRY AND RURAL DEVELOPMENT RESEARCH INSTITUTE, LAO PDR

This Memorandum of Understanding (MOU) is made between Institute of Food Crops, Yunnan Academy of Agricultural Sciences (YAAS), China and Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute (NAFRI), Lao PDR.

Institute of Food Crops, Yunnan Academy of Agricultural Sciences, China, #2238 Beijing Road, Kunming, China, a non-profit governmental institution with the main responsibilities on crop breeding and relevant research on maize, rice, wheat and beans.

AND

National Agriculture, Forestry and Rural Development Institute, Nongviengkham village, Saythany district of Vientiane municipality, Lao PDR is government research institute. NAFRI mandates to undertake integrated agriculture, forestry and fisheries research in order to provide technical information.

And WHEREAS based in the principals of equality, friendship, mutual benefits & with the aim of strengthening cooperation in the field of Agricultural Research between Institute of Food Crops, Yunnan Academy of Agricultural Sciences, China and Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute, Lao PDR, the contracting parties to this MOU intend to coordinate their efforts to promote the development of maize hybrids, commercial hybrid seeds and the commercial production of those seeds in Laos through defined roles and responsibilities.



1. Objectives of the MOU

- To develop and promote maize hybrids for different production zones in Laos through germplasm exchange, hybrid development, selection, and testing of Laos and YAAS parents (A, B & R lines).
- Capacity development for Lao team members in maize breeding, provide hybrid seed production technology, and capacity development in establishing partnerships with private sector in seed production and promotion, for promising hybrids developed through joint efforts.
- Workplan developed for long term objectives with annual objectives and outputs developed in annex table activities.

2. Obligations and duties of Institute of Food Crops, Yunnan Academy of Agricultural Sciences

- i. Institute of Food Crops, Yunnan Academy of Agricultural Sciences will provide high yielding maize hybrids and germplasm through a material transfer agreement.
- ii. Will provide related production technology of the selected maize hybrids.
- iii. Will provide breeding material comprising hybrids/advance lines (A, B and R lines) for testing under Laos's agro-ecological conditions to determine their productive potential in Laos.
- iv. Will be responsible for not extending the Laos germplasm to third parties without consent of Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute.
- v. Will provided staff training in technology of the maize hybrids in short term and long-term training in China.
- vi. To achieve the aforesaid objectives, the parties shall work within the parameters of following roles and responsibilities.

3. Obligations and duties of Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute, Lao PDR

- i. Use of Laos's parents in developing hybrids for mutual benefits of both parties.
- ii. Disseminate and develop production technology for maize hybrids.
- iii. Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute, Lao PDR will provide technical assistance for Chinese scientists in germplasm testing and the relevant recommending authority

- at the National level, will conduct trials for maize hybrids/germplasm testing under different ecologies of Laos to determine their productive potential.
- iv. Will develop and evaluate new germplasm resources/breeding materials and hybrid combinations in Laos through hybridization of Chinese and Laos parental lines.
- v. Will facilitate and provide technical assistance for maize germplasm and hybrid combinations testing/development and evaluation, and will be responsible for the relevant expenses.
- vi. Will exchange maize germplasm with the Institute of Food Crops, Yunnan Academy of Agricultural Sciences
- vii. Will be responsible for not extending the germplasm provided by the Institute of Food Crops, Yunnan Academy of Agricultural Sciences to third parties without consent of Institute of Food Crops, Yunnan Academy of Agricultural Sciences.
- viii. To achieve the aforesaid objectives, the parties shall work within the parameters of following roles and responsibilities.

4. Rights and Interests

i. Intellectual Property Rights (IPRs)

- a- The intellectual Property Rights of the germplasm resources, breeding materials and hybrid combinations which are provided by Institute of Food Crops, Yunnan Academy of Agricultural Sciences belongs to the Institute of Food Crops, Yunnan Academy of Agricultural Sciences. Similarly, the IPRs of germplasm resources, breeding materials and hybrid combinations which are provided by Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute belongs to Maize and Cash Crop Research Center, National Agriculture and Forestry Research Institute.
- b- The intellectual property rights of the maize germplasm, breeding materials and maize hybrids developed by the joint work of Institute of Food Crops, Yunnan Academy of Agricultural Sciences and Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute, Lao PDR use of the exchanged germplasm and breeding materials, will be shared by Institute of Food Crops, Yunnan Academy of Agricultural Sciences and Maize and Cash Crop Research Center, National Agriculture and Forestry Research Institute, Lao PDR according to the ratio of genetic composition (male line: female line: combination = 3:4:3) of the new germplasm, breeding materials and maize hybrids.

ii. Product Development Rights and Interests

- I. The product developed through collaborative endeavor will be jointly owned by the two parties on the following bases.
- a. The best hybrids of the Institute of Food Crops, Yunnan Academy of Agricultural Sciences identified as a result of evaluation by Maize and Cash Crop Research

- Center, National Agriculture Forestry and Rural Development Research Institute in different ecologies will be jointly shared by Institute of Food Crops, Yunnan Academy of Agricultural Sciences and Maize and Cash Crop Research Center, National Agriculture and Forestry Research Institute.
- b. The A & R line identified by Institute of Food Crops, Yunnan Academy of Agricultural Sciences and Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Institute will be jointly owned by the two parties on a 50:50 bases.
- c. The hybrid re-constituted from the lines (item b) will also be owned by the two parties on a 50:50 bases.
- d. Institute of Food Crops, Yunnan Academy of Agricultural Sciences and Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute will jointly train private and public parties for maintenance of plant lines and hybrid seeds production on terms and conditions negotiated and agreed mutually upon with the private sector organization.
- II. The products will be identified with the name of Institute of Food Crops, Yunnan Academy of Agricultural Sciences and Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute as PAHS.
- 5. An initial 1 year evaluation period will take effect upon signing the MOU, and with satisfactory completion of the objectives during this period, the agreement will automatically be extended 4 more years.
- 6. If one of the parties wants to terminate the agreement, they should provide one year's notice, without which the agreement will continue in effect.

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- 7. The agreement will remain operative for at least 5 years.
- 8. The agreement may be modified or amended, if needed, by mutual consent of both parties.
- 9. The cooperation could be extended for another 5 years if found viable.
- 10. Both the parties will be obliged to make arrangements for hybrid seed production in Laos.

11. General:

- 11.1 For implementation of this MOU, a hybrid maize group will be established and the agreement will be signed individually under mutual negotiations of Institute of Food Crops, Yunnan Academy of Agricultural Sciences and Maize and Cash Crop Research Center, National Agriculture Forestry and Rural Development Research Institute, and abide by national laws and international agreements.
- 11.2 Either party may propose any amendment in any clause of this MOU at any time with mutual consent.
- 11.3 The Memorandum of Understanding may be terminated by either party by giving one year prior notice.
- 11.4 Governing law and settlement of disputes
- I. All activities under this Agreement will conform to the rules and regulations of China and Laos when carried out in either of the two countries.

- II. The Parties will settle disputes amicably by negotiation.
- III. If a dispute cannot be settled by negotiation between the Parties, it shall be submitted to conciliation in accordance with the UNCITRAL Conciliation Rules. The place for conciliation will be in England, a neutral ground for both Parties, and the language will be English.
 - 11.5 Guarantee or the implement of agreement
 - I. The Parties agree to establish an efficient channel for the exchange of germplasm for evaluation and use through the International Treaty for Plant Genetic Resource for Food and Agriculture, and associated regulations from the Laos government.
- II. Laos shall guarantee an unimpeded import and export of germplasm. To facilitate such import and export, Laos shall secure the appropriate channels and measures with Laos national and regional quarantine, biosafety and any other relevant government authorities in Laos.
- 11.6 This **MOU** shall come into effect from the date of its signing and shall be effective till termination

HAVING AGREED TO THE ABOVE CONTENTS OF MOU, BOTH PARTIES CONCERNED HAVE AFFIXED THEIR SIGNATURES.

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Director General

For and on Behalf of

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