







Memorandum of Understanding

between

Food and Agriculture Organization of the United Nations (FAO)

and

Consiglio Nazionale delle Ricerche (CNR)

Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CRA) Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (ENEA) Rome, Italy

PREAMBLE

This Memorandum of Understanding (MoU) is entered into by the Food and Agriculture Organization of the United Nations with its headquarters in Rome, Italy from one side; and Consiglio Nazionale delle Ricerche, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria, and Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile, all with headquarters in Rome, Italy.

Recognizing that the Food and Agriculture Organization, (hereinafter referred to as "FAO") is a specialized agency of the United Nations system, with a vision for a world free from hunger and malnutrition, where food and agriculture contribute to improving the living standards of all, especially the poorest in an economically, socially and environmentally sustainable manner. It is a knowledge organization with three global goals — eradication of hunger, food insecurity and malnutrition, elimination of poverty through increased food production and rural development and sustainable management and utilization of natural resources for the benefit of all. Within the framework of five Strategic Objectives, FAO works closely with Member Nations and a range of partners at national, regional and global levels to achieve these goals.

Acknowledging that Consiglio Nazionale delle Ricerche, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria, and Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (hereinafter referred to as "CNR, CRA and ENEA", respectively) are

• **CNR**: The National Research Council of Italy is a public sector research organization with a mission to promote the scientific, technological, economic and social development of the country. CNR is composed of a network of seven departments, 107 research institutes, and over 8 000 researchers, distributed all over the national territory. It covers

research and scientific and technological development in the areas of Agriculture and Food Sciences, Bio-Medicine, Engineering, Environmental and Social Sciences among others. CNR was founded in 1923 and was transformed into a public body in 1945. http://www.cnr.it/.

- CRA: The Council for Agricultural Research and Economics (CRA) is a National Research Organization which operates under the supervision of the Ministry of Agriculture, with general scientific competence within the fields of agriculture, agroindustry, food, fishery, forestry and economics. CRA employs over 1700 researchers and staff, and operates through research and innovation structures distributed throughout national territory, which allows it to widely extend its expertise and proficiency, and to closely operate in conjunction with central administrations, local and regional institutions, companies and various trade, industrial and legal associations. The CRA has been established with the legislative decree n.454/99 and gathers together the experience of two previously independent Institutes: INRAN (Istituto nazionale di Ricerca per gli Alimenti e la Nutrizione) and INEA (Istituto Nazionale di Economia Agraria). http://sito.entecra.it/.
- ENEA: The National Agency for new technologies, renewable energy and sustainable economic development is a public sector organization operating in the fields of energy, the environment and new technologies to support Italy's competitiveness and sustainable development. It promotes and carries out basic, applied research and innovation technology activities including through the development of prototypes and product industrialization; technology transfer and dissemination studies, measurements and assessments, training and information aimed at broadening sectoral expertise, and public awareness. ENEA employs over 2 600 staff, distributed across its 11 research centres. It was established in 2009 reorganizing prior research organizations established in 1952. http://www.enea.it.

Conscious that CNR, CRA and ENEA, among other activities, operate for the development and innovation of the national agro-industrial production system, with the objective of improving its sustainability and efficiency. CNR, CRA and ENEA's activities include basic research and development and transfer of enabling technologies, including in partnership with the private sector and the provision of advanced technological services to the agro-industrial production system.

Noting that FAO and CNR, CRA and ENEA have a history of close collaboration, particularly in the areas of plant genetic resources, integrated pest management, nutrition, remote sensing, diagnostics of animal diseases and water management. In addition, both CNR, and CRA have placed their germplasm collections under the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture.

Recognizing that FAO and CNR, CRA and ENEA have a common global interest in promoting improved coherent action for achieving integrated approaches to sustainability; improvement of diet quality; and agricultural innovation in developing countries.

Considering that cooperation between FAO and CNR, CRA and ENEA would mean better access and exchange of information, knowledge and expertise in the field of food and agriculture

sustainability that can benefit the services that FAO provides to its Members within the framework of the Strategic Objectives of the Organization.

Acknowledging the FAO and CRA partnership agreement of 7 December 2011, FAO and CNR, CRA and ENEA (hereinafter referred to as "the Parties") have agreed to the following:

Article 1. Purpose of this Memorandum of Understanding

The purpose of this MoU is to provide a framework for cooperation between the Parties with the overall goal of enhancing the sustainability of the food production and nutrition in developing countries.

Article 2. Joint Collaboration

- 2.1 The Parties shall consult on matters mentioned in Article 1 that are of mutual interest and that capitalize on the comparative advantages of the Parties. The broad thematic areas where synergies will be established upon mutual agreement between the Parties are, among others:
 - integrated approaches to sustainability;
 - agricultural innovation;
 - food and nutrition;
 - processing and value addition of agri-food products.
- 2.2. Whenever desirable, the Parties may seek each other's co-operation with a view to promoting the development of specific activities in fields of common interest and may conclude specific agreements for joint action with the aim of attaining objectives of mutual interest, including through exchange of letters will be concluded, as required.
- 2.3 The present MoU implies no financial commitment by any Party. Activities to be implemented under this MoU are subject to the availability of staff and financial resources. The Parties shall enter into separate agreements, within the framework of this MoU, for matters which may involve the commitment of funding or other resources. Agreements concluded between any or all of the Parties under this MoU shall define agreed activities, manner and extent of participation by each Party, financial aspects, including in-kind contributions, and arrangements on intellectual property rights.
- 2.4 The conclusion of this MoU does not preclude FAO from entering into separate agreements with one or more of the other Parties to undertake activities that do not fall within the framework of this MoU.
- 2.5. Possible activities in the areas of collaboration between the Parties are specified in Annex I, which is an integral part of this MoU. The Parties shall meet for coordination and review of the joint activities to be developed as described in Annex I as deemed necessary, and may agree, in such meetings, to modify the activities and work plans based upon their review, such modifications entering into effect upon approval by all the Parties of the records of those meetings.
- 2.6 Subject to the Parties' respective regulations, rules and policies and the present MoU, the Parties may jointly develop proposals to be submitted to funding agencies. Neither Party shall

engage in any fundraising activity with third parties in the name of or on behalf of the other Party, without their prior express written approval in each case.

Article 3. Knowledge Sharing, Exchange of Information and Documents

To the extent possible, the Parties will promote knowledge sharing, including the exchange of information and documents concerning matters of common interest. The Parties shall have free and unrestricted access, where feasible, to all information developed under this MoU for their internal use.

Article 4. Use of Logo, Name and Emblem

The Parties agree not to use in any press release, memo, report or other published disclosure related to this MoU or in any other document, annex or arrangement related thereto, the name, logo or emblem of any other Party without prior written consent of the Party concerned.

Article 5. Intellectual Property Rights

- 5.1 Intellectual property rights, in particular copyright, of material such as information, software and designs, made available by CNR, CRA and ENEA or FAO to be used to carry out the activities under this MoU shall remain with the originating Party. If deemed appropriate, authorizations for the use of such materials by the other Parties will be addressed in agreements concluded in accordance with Article 2 above.
- 5.2. Copyright of materials and reports, as well as rights to any other intellectual property, developed jointly by the Parties will be vested in FAO. CNR, CRA and ENEA will enjoy perpetual, royalty-free, non-exclusive and non-transferable licenses to use such materials for non-commercial purposes. Notwithstanding the foregoing, if deemed appropriate due to the materials in question and the respective contribution made by each Party, the Parties may conclude separate agreements to govern intellectual property rights on a case-by-case basis in respect of materials jointly developed by two or more Parties under this MoU in accordance with Article 2 above.

Article 6. Confidentiality Clause

None of the Parties nor their personnel shall communicate to any other person or entity confidential information made known to it by another Party in the course of the implementation of this MoU nor shall it use this information to private or company advantage. This provision shall survive the expiration or termination of this MoU.

Article 7. Communications – Focal Points of Contact

Any notification, notice or request required to be given or made under this MoU shall have been duly made or given when addressed in writing as follows:

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS – FAO

Viale delle Terme di Caracalla

Rome 00153, Italy

Attention: Karin Nichterlein, Officer-in-Charge

Research and Extension Unit

Email address: Karin.Nichterlein@fao.org Telephone number: +39 0657055529

CONSIGLIO NAZIONALE DELLE RICERCHE - CNR

Piazzale Aldo Moro, 7 - 00185, Rome, Italy

Attention: Dr. Francesco Loreto

Direttore del Dipartimento di Scienze Bio-agroalimentari

Email address: <u>direttore.disba@cnr.it</u> Telephone number: +39 0649937802

CONSIGLIO PER LA RICERCA IN AGRICOLTURA E L'ANALISI DELL'ECONOMIA AGRARIA - CRA

Via Nazionale, 82 – 00184, Rome, Italy

Attention: Stefano Bisoffi

Direzione Centrale Attività Scientifiche

Email address: <u>direzionescientifica@entecra.it</u> Telephone number: Tel. +39 0647836250

AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE - ENEA

Lungotevere Thaon di Revel, 76 - 00196, Rome, Italy

Attention: Dott. Massimo Iannetta

Responsabile Unità Tecnica Sviluppo Sostenibile ed Innovazione del Sistema

Agro-Industriale (UTAGRI)

Email address: massimo.iannetta@enea.it Telephone number: +39 0630483339

Article 8. Privileges and Immunities

Nothing in this MoU or in any other document, annex or arrangement related thereto, shall be construed as constituting a waiver of privileges or immunities of FAO or its personnel, nor as extending any privileges or immunities of FAO to CNR, CRA and ENEA or to their personnel.

Article 9. Applicable Law

The present MoU and any annex, document or arrangement relating thereto, shall be governed by general principles of law to the exclusion of any single national system of law. Such general principles of law shall include the UNIDROIT General Principles of International Commercial Contracts 2010.

Article 10. Settlement of Disputes

10.1 Any dispute between any of the Parties, arising out of the interpretation or execution of the present MoU, or any document or arrangement relating thereto, shall be settled by negotiations and mutual agreement.

- 10.2 If the parties to the dispute are unable to reach an agreement on any question in the dispute or on a mode of settlement other than arbitration, any party/Parties to the dispute shall have the right to request arbitration in accordance with the Arbitration Rules of UNCITRAL, as at present in force by sending a request for arbitration to all other Parties to this MoU.
- 10.3 In the event that the request for arbitration names only one claimant and one respondent, and no Party has exercised its right to joinder or intervention in accordance with the paragraphs below, the claimant and the respondent shall each appoint one arbitrator within 15 days after the expiry of the period during which Parties can exercise their right to joinder or intervention. The two arbitrators shall appoint the third arbitrator, who shall act as presiding arbitrator.
- 10.4 In the event that more than two Parties are named in the request for arbitration or at least one party exercises its right to joinder or intervention in accordance with the paragraphs below, the claimant(s) shall jointly appoint one arbitrator and the respondent(s) shall jointly appoint the other arbitrator, both within 15 days after the expiry of the period during which Parties can exercise their right to joinder or intervention. The two arbitrators shall appoint the third arbitrator, who shall act as presiding arbitrator.
- 10.5 Any Party to this MoU may intervene in any arbitration proceedings by submitting a written notice of claim, counterclaim or cross-claim against any Party to this MoU, provided that such notice is also sent to all other Parties to this MoU within 30 days from the receipt by such intervening Party of the relevant request for arbitration or notice of claim, counterclaim or cross-claim.
- 10.6 Any Party to this MoU named as respondent in a request for arbitration, or a notice of claim, counterclaim or cross-claim, may join any other Party to this MoU in any arbitration proceedings by submitting a written notice of claim, counterclaim or cross-claim against that Party, provided that such notice is also sent to all other Parties to this MoU within 30 days from the receipt by such respondent of the relevant request for arbitration or notice of claim, counterclaim or cross-claim.
- 10.7 The Parties to the dispute agree to be bound by any arbitration award rendered in accordance with this Article as the final adjudication of any such dispute. Any joined or intervening Party shall be bound by any award rendered in accordance with this Article even if such Party chooses not to participate in the arbitration proceedings.

Article 11. Entry into Force and Duration

The present MoU shall be signed by all the Parties and will enter into force on the date of the last such upon signature. This MoU shall remain in force for a period of three (3) years following its entry into force and be renewable for successive similar periods thereafter by written agreement of the Parties, based upon successful past implementation.

Article 12. Notification and Amendments

12.1 Each Party shall promptly notify the others in writing of any anticipated or actual material changes that will affect the execution of this MoU.

12.2 Any amendment to this MoU shall be effected only on the basis of written mutual consent by the Parties. Such amendments shall enter into force one month following notifications of consent by all the Parties. Notwithstanding the foregoing, the work plans to be developed as described in Annex I may be modified through agreement reached at review meetings, as provided in Article 2 above, as reflected in the records of those meetings.

Article 13. Withdrawal

- 13.1 Any Party may withdraw from this MoU by giving three (3) months' written notice to the other Parties. By withdrawing, the rights and obligations of the withdrawing Party under this MoU shall cease to be effective. Such withdrawal shall not affect commitments entered into in good faith prior to withdrawal in accordance with this Article. Any withdrawal from this MoU shall be without prejudice to: (a) the orderly completion of any ongoing collaborative activity; and (b) any other rights and obligations of the Parties accrued prior to the date of withdrawal under this MoU or any legal instrument executed pursuant to this MoU.
- 13.2 Unless agreed otherwise by the remaining Parties, the MoU shall remain in effect for the remaining Parties.

This MoU will be drawn up in English in four copies, with one copy for each Party. Either copy is of equal validity.

IN WITNESS WHEREOF , the duly authori signatures below.	zed representatives of the Parties affix their
On behalf of the Food and Agriculture Organization of the United Nations (FAO)	On behalf of Consiglio Nazionale delle Ricerche (CNR)
Maria Helena Semedo Deputy Director-General, Natural Resources Coordinator	Prof. Luigi Nicolais Presidente
Date	Date
	On behalf of Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CRA)
	Dr. Salvatore Parlato Commissario Straordinario
	Date
	On behalf of Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (ENEA)
	Prof. Federico Testa Commissario

Annex I

Provisional Areas of Collaboration

On the basis of this MoU between FAO and CNR, CRA and ENEA, and in view of the desire to strengthen collaboration on matters of mutual interest and ensure harmony and synergy in the work of the Parties, the following areas of collaboration have been identified for implementation, subject to the availability of staff and financial resources. The implementation of the collaborative activities under this MoU shall be subject to the application of the respective rules and procedures of each Party.

- 1. **FAO Strategic Objectives (SO):** The five SO of the Organization are as follows:
 - SO 1: Contribute to the eradication of hunger, food insecurity and malnutrition.
 - SO 2: Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner.
 - SO 3: Reduce rural poverty.
 - SO 4: Enable more inclusive and efficient agricultural and food systems at local, national and international levels.
 - SO 5: Increase the resilience of livelihoods to threats and crises.

2. Partners' Strategic Priorities:

- Advancing scientific research for addressing the multiple food and agricultural challenges, including sustainability, nutrition and climate change.
- Promoting innovation of the agricultural production system.
- Partnering and networking to share knowledge and expertise.

3. Collaborative Activities:

The main areas identified for collaborative activities are - Integrated approaches to sustainability; Strengthening agricultural innovation; Food and nutrition; and Processing and value-addition of agri-food products. The collaboration will contribute to the products and services of the FAO Strategic Objectives - SO2 and SO 4. Specific joint activities are as below:

3.1 **Integrated approaches to sustainability:** Collaboration between FAO and partner institutions will support development of sustainable agriculture production systems and systems level approaches through creating synergies and promoting interdisciplinarity. Joint activities to be undertaken as follows:

Raise awareness, promote networking and information sharing in the ongoing initiatives as below:

- International Year of Soils 2015 and such forthcoming events.
- Sustainability Assessment of Food and Agriculture systems (SAFA).
- Organic farming research networks and technology platforms (e.g. RIRAB, PTBio Italia, TP Organics).
- World Overview of Conservation Approaches and Technologies (WOCAT).

- Globally Important Agricultural Heritage Systems (GIAHS).
- Sustainable Food Value Chain Development (SFVC knowledge platform).

Promote capacity development, scientific exchanges, research case studies, data sharing and modeling, initially in the following areas:

- Sustainable soil management within the framework of the Global Soil Partnership.
- Ecosystem characterization approaches, including support to the preparation of the *State of the World's Biodiversity for Food and Agriculture*.
- Gene bank database management best practices for plant and animal genetic resources, (e.g. CRA PlantA-Res, CNR BioGenRes, FAO WIEWS and FAO DAD-IS).
- Implementation of relevant international normative frameworks, including on Chemicals and Pesticide Conventions, Global Plans of Action and Global Assessments on Genetic Resources for Food and Agriculture.
- 3.2 **Strengthening agricultural innovation**: FAO and the partner institution will jointly develop capacities, for promotion of agriculture innovation in developing countries, by strengthening the research institutes and technical advisory services, developing case studies, information exchange on tools and technologies. Specific activities will capitalize, and expand ongoing collaborations as follows:
 - Joint development of projects and/or initiatives for capacity development for agriculture innovation systems, building on existing projects and experiences led by FAO and CNR.
 - Share proven technologies and practices of partner institutions through FAO's TECA platform and build synergies with the AGRITRANSFER platform, developed and managed by CRA.
 - CNR, CRA and ENEA will provide a brief description of the various technical expertise
 on food and agriculture innovations available in their institutions and can be tapped by
 FAO as appropriate.
 - Undertake joint studies on impact of research, building on the ongoing collaboration between FAO and ENEA.
 - Identify innovative tools for supporting habitat monitoring and locust early warning system to support management of Transboundary Plant Pests and Diseases.
- 3.3 **Food and Nutrition**: Collaboration between FAO and partner institutions will focus on improvement of diet quality through food-based sustainable interventions, in particular in developing countries, and sharing experience of Italy. The main areas of joint activities will be on harmonization of guidelines, application or validation of analytical methods and devices, capacity development, knowledge exchange and data sharing development of experiential case studies. Overall, it would contribute to the development of an integrated platform with cross-linked databases on reference materials, reference methods, food composition, food consumption, markers (for products and processes), for food quality and safety and traceability of the whole value chain. The focus of joint activities will be in the following areas:

Dietary Guidelines

- Develop common methodologies for promoting dietary diversity as a key determinant of nutritional outcomes, with a focus on integrating sustainability criteria into food based dietary guidelines. Develop a graphical representation of dietary guidelines (e.g. pyramids, plate).
- Jointly prepare a Concept Note with CRA Centro di ricerca per gli alimenti e la nutrizione (CRA-NUT) to design a tool for developing *low-cost* healthy diets, focusing on low-income countries.
- Exchange information on evaluation of the impact of dietary guidelines on dietary changes, including on methodology and indicators.

Food Composition and Food Consumption

- Development of integrated databases through data sharing, comparison and analysis (e.g. Food Composition Tables, Italian individual Food Consumption Data with the FAO/WHO Global Individual Food Consumption Data Tool).
- Harmonize methodologies for use of food composition data for labeling, and for assessing the coverage of nutrient requirements, considering labels as an educational tool.
- Evaluation of diet adequacy and coverage of requirements from dietary consumption databases at population level and in specific subgroups. Study introduction in diet of healthy, added-value raw materials obtained from native and/or adapted minor cereal and pseudo-cereal crops.

Food Safety

- Share scientific methodologies and strengthen capacity development for fungal early detection and analytical determination of mycotoxin contamination, as well as other environmental and microbiological contaminants.
- Strengthen risk analysis of contaminants, translocation from agricultural soils to plants and through the entire supply chain.
- Research studies on metabolomics of plant-pathogen interaction that play a role in the plant defense strategies toward pathogens infection.
- Enhancing sustainable food safety knowledge and awareness in developing countries through joint training initiatives, scientific exchanges and capitalization of existing networks for future cooperation.
- 3.4 **Processing and value addition of agri-food products**: FAO and the partner institutions will jointly explore opportunities for collaboration on issues related to agro-food industry development, value chain development, and capacity development in value addition for developing and transitional countries. This may include:
 - Information exchange and study tours to the relevant institutions.
 - Facilitate exchange visits to relevant Italian institutions and research centres as well as related local value adding enterprises.

- Explore the development of joint work and collaboration on food processing, value addition and local food enterprise including agro-food industry appraisals, institutional development and capacity enhancement.
- Facilitate exchange of updated technologies and processes for agro-food industries.
- Facilitate exchange on farmer-market linkages and various certification schemes (e.g. voluntary and geographic origin standards) that are essential to create value in food systems.
- 4. **Joint Implementation**: For the implementation of the above-mentioned activities, a detailed annual/biennial work plan shall be developed and focal points assigned as appropriate. The work plan may be initiated by any Party, but will require the approval of all the Parties for implementation. In order to facilitate and guide effective implementation *ad hoc* Working Groups composed of focal points and others, shall be established. The Working Groups shall meet for coordination and to review implementation on a regular basis and, as needed, amend the work plan. Meetings of the Working Groups should be virtual to the extent possible or physical meetings could be conducted if they can be arranged in conjunction with official events.