Contribution from Zoltan Kalman, Permanent Representative of Hungary to the Rome-based food and agriculture agencies of the UN.

- 1. We welcome the HLPE Report on "Agroecological and other innovative approaches for Sustainable Agriculture and Food Systems that Enhance Food Security and Nutrition". We strongly suggest that the recommendations of the HLPE Report should be considered as a basis of the policy convergence process.
- 2. Agroecology is much wider and more complex than simple techniques it is an ecosystem based, integrated and cross-sectoral approach and as such it is not limited to agriculture, it applies a holistic, food system approach. Although the title refers to "agroecological" approaches, we need to underline that agroecology is not simply one of the various specific technologies or innovations. These techniques and innovative solutions are therefore not comparable to agroecology but can be part of it.
- 3. As a result of the policy convergence process our hope and expectation is that **action-oriented policy recommendations** will be adopted to promote agroecology, in alignment with national policies and priorities.
- 4. Regarding new technologies, precision agriculture, drones, smart phones and other innovative solutions and technologies, we think biotechnological methods could also be considered, many of which are widely used in agriculture (for example fermentation). Concerning innovations and new technologies, including biotechnology, we consider essential to strongly emphasize that these methods, innovations and new technologies should meet the criteria of sustainability, in particular the environmental and social dimensions. Furthermore, innovations, precision agriculture etc. should be made available, accessible and affordable for the smallholders, if we want achieve significant progress in improving livelihood of the rural poor. Agroecology can embrace a variety of innovations and new technologies, provided they are sustainable.
- 5. As independent and neutral scientific research can clearly demonstrate, genetically modified organisms (including CRISPR) do not fully meet the sustainability criteria. Environmental (such as biodiversity loss or soil degradation due to monoculture), and social issues (human health concerns, input-supply dependence, etc.) all justify that the precautionary principle is followed. This is the reason why the production of GMO crops is forbidden in Hungary, as laid down in our Constitution. We think all countries and all farmers should be given the opportunity to take an informed and free decision and choose to produce or not to produce GMO crops.
- 6. Agroecology provides adequate responses to the big environmental challenges we are facing in our food system such as GHG emissions, soil degradation, biodiversity loss, pollution, etc. In particular, agroecology has an important role in adaptation to and mitigation of climate change and in contributing to achieving countries' NDCs. Agroecology is climate-smart by definition but clear distinction should be made with the concept of Climate Smart Agriculture, which is much narrower in scope and might sometimes include techniques not compatible with agroecology, such as genetic engineering. Agroecology is a much broader concept, it goes well beyond being climate smart. Its role in preserving biodiversity, improving soil conditions, respecting animal welfare, lowering ecological footprint of food (by using less chemicals, less transport due to short supply chains, etc.) is highlighted in the report and should be considered during the process of policy convergence.

In order to avoid confusions, we strongly advise to refrain from using the acronym of "CSA" for climate-smart agriculture. Since many years CSA has been the well established acronym of Community Supported Agriculture, an innovative solution under the umbrella of agroecology, to connect producers and consumers.

7. Regarding the **social impacts of agroecology,** the concept of inclusive rural transformation should be considered. While increasing productivity is essential to improve rural livelihood, this should go hand in hand with the need of preserving and creating jobs in rural areas. In particular in Africa, where 70-80% of the population live in rural areas and their livelihood is based on agriculture. Inclusivity is key, to take any decisions together with the local communities and develop their

Contribution from Zoltan Kalman, Permanent Representative of Hungary to the Rome-based food and agriculture agencies of the UN.

- agriculture gradually, paying due attention to providing alternative employment opportunities (in food processing, services, etc.). Special attention should be paid to make rural life more attractive for the Youth. Rural employment is particularly important, as far as no alternative employment opportunities are available, to prevent migration and displacement.
- 8. Agroecology's impact on human health and wellbeing is significant as well. As a consequence of efforts to keep food prices low, industrial, highly processed foods are many times of low quality foods with negative impacts on human health.
- 9. We believe that in addition to the environmental and social dimensions it is extremely important that agriculture and food systems are economically viable. However, we should pay due attention to the fact, throughout the policy convergence process, that economic sustainability is the consequence of economic policy incentives. Profitability is often closely linked to the subsidies applied in support of one or another agricultural production approach or food system model. With a levelled playing field, sustainable approaches and practices would be economically viable and competitive, without requiring particular subsidies. Obviously, for the sake of accelerating the transition to more sustainable food systems, targeted policy measures could by applied to promote agroecology.
- 10. In addition, we should pay attention to the scientific evidence related to calculation of the "hidden costs" of the various food systems. The "True Costs Accounting" (applied by FAO as well) takes into consideration the so-called externalities. If the environmental (biodiversity loss, soil degradation, plastic pollution, etc.) and social (impacts on public health, on rural employment, etc.) externalities are "internalised", it turns out that input-intensive, industrial agriculture and food systems are not always competitive, many times they are economically viable only due to subsidies or other policy incentives. On the other hand, environment-friendly, sustainable approaches (including agroecology), combining traditions with innovations, with no negative externalities to be internalised, are economically viable solutions.
- 11. The cultural value of keeping traditions as "fourth dimension" of sustainability could be mentioned as well. Agroecology contributes to preserving and improving the knowledge on traditional production systems and techniques, also by applying local, autochthone varieties and pass these on to future generations. Agroecology also has a role in preservation and maintenance of rural landscape and viable countryside. This approach is very much in line with the GIAHS (Globally Important Agricultural Heritages Systems) initiative launched by FAO, highlighting the importance of dynamic conservation. Agroecology is well placed to maintain the 'indigenous communities' traditional knowledge on agriculture and integrate it with the results of scientific research, thus contributing also to improving livelihood of indigenous communities.