

Recommendations from the “Expert Meeting on neglected and underutilized species (NUS) value chains in sub-Saharan Africa: Agricultural diversification, Agenda 2030 and climate change responses”, 29-30 November 2016, Cotonou, Benin

- NUS should be at the centre of global efforts on nutrition, sustainability and climate change adaptation. They can provide a robust contribution in the implementation of most of the 17 SDG Goals of the UN Agenda 2030 on Sustainable Development. In view of their roles, participants advocated greater financial support for their use enhancement, through development of their value chains, capacity building of value chain actors aiming at a scale of intervention that is transformative.
- Mainstreaming of NUS into policy and government actions is a process requiring time and constant commitment over the years by both researchers and policy makers. Successful policies on NUS (like those emerging in India on minor millets (now included in the Public Distribution System) or in Brazil (use of NUS in school feeding programs) should be better shared and promoted for replication more widely as virtuous examples to follow.
- Mainstreaming NUS needs champions who play a key role in bringing issues of NUS to the forefront: scientists who are passionate about them, educators who can promote the inclusion of NUS in higher education *curricula* or development experts who can advocate policy changes in support of their use. Identifying, coaching and promoting such champions would be an essential action to pursue. At the institutional level, Bioversity International, CFF or the M.S. Swaminathan Research Foundation (MSSRF) are also championing NUS at different levels and their experience can help build broader platforms for NUS mainstreaming. Multiple entry points can be used for mainstreaming NUS and these can include climate change, nutrition, gender, and value chain development.
- Access to quality information on NUS needs to improve in order to better guide decision-making. **Suitability maps of NUS crops (from ‘big data’), crop phenology calendar, pests and diseases and their management and, nutritional properties** are but some of the areas for which value chain actors need to be better informed. Research on nutritional content of NUS should be given high priority along with the standardization of nutrition-related methodologies across countries in order to enable comparisons by experts and help formulating sharper messages to decision makers.
- Mainstreaming of NUS in higher education has only just started. Promoting the NUS curriculum guide developed by the ACP-EU project is high priority. There is also need to develop user-friendly, accessible learning resources on NUS topics. All this requires active work with both academic leaders and lecturers at all levels, and support from policy level and donors.
- Institutional capacity for mainstreaming NUS in agricultural development needs to be strengthened. This includes capacity for using and/or facilitating value chain approaches, involving all the key actors from farm to fork. There is need for disciplinary capacity plus capacity to connect with other disciplines.
- Expand partnerships in the research and development initiative on NUS and bring in more entrepreneurs, processors and consumers. Involving business people in NUS activities is important. Communication strategies also need attention, to effectively target the different categories of NUS stakeholders. Engaging with the youth is an opportunity.
- A tracer study of some 400 trainees engaged in the two consecutive ACP-EU NUS projects should be carried out. It would provide interesting insights in the outcomes

and impacts of the project, and provide feedback for future NUS initiatives in Africa and elsewhere.

- Since the portfolio of NUS is huge, the ACP-EU project covered in this expert meeting decided to focus on model species, viz. Bambara groundnut and grain amaranth, aiming at developing methodologies and solutions that can be applied to other similar species. To draw the full benefits of such an approach, the work on upgrading the value chains of these two crops needs to be continued and lessons systematically documented and shared also in the coming years. Other priority pilot crops should be added to the portfolio. Learning from pilot NUS crops, instead of “*re-inventing the wheel*” in their use enhancement is believed to be a robust way forward for a global NUS strategy.
- Business incubation opportunities are clearly present. However, in terms of commercialising NUS products, going from pilot scale to wider scale can be beyond the means of small-scale entrepreneurs, even if the pilot scale is profitable. Institutional support, including access to financing, meeting food safety standards, advise on packaging, export marketing, etc., for such value chain upgrading, will be required and future projects should be considering that.
- Literature on NUS is difficult to access and a lot of research results on NUS is buried in the so called ‘grey literature’ (e.g. MSc theses) which have been not published and hence difficult to be accessed by the NUS community. Facilitating access to scientific publications as well as project-related publications through sharing, networking and open source articles is a priority. One such repository is the www.nuscommunity.org/ which is managed by Bioversity International.
- Researchers working on NUS need to be better connected with one another. An excellent move would be the launching of a Forum of all platforms working on NUS crops which would help avoiding duplication, promote exchange of ideas, build synergy, and give visibility to very interesting albeit isolated work being carried out around the world, including Africa. Thesis research projects on NUS are valuable but **need to be better ‘pooled’, marketed and funded** for more robust outputs.
- NUS research in sub-Saharan Africa needs more visibility. An African Centre for research on NUS should be set up, to work with CFF, Bioversity, IITA and other like-minded organisations (covering NUS in a broad sense, including edible insects and mushrooms). IITA is ready to collaborate on NUS initiatives.

