Promotion of agroecology farming system and local owned seeds

- **Seed as source of wealth creation to promote seed sovereignty in Africa**

Vibrant local seed industry is a key for ensured food sovereignty in Africa. ESAFF and other likeminded organisation are worried with a trend in putting policies, practises and legislations that takes away seeds from the hand and ownership of African smallholder farmers. To enhance capacity of small scale farmers in sustainable agro ecological farming practices in the region, ESAFF motivated members to work on seed banks as an alternative to ensure food sovereignty. ESAFF continued to document life changing stories on farmers who have

managed to conduct seed multiplication in Tanzania, Zimbabwe and Zambia and shared with other network members. The aim of these documentations was to show that smallholder farmers can engage in production and sustaining open pollinated varieties that can ensure that African farmers continue to use and preserve local seeds (composite) that are suitable to produce more yields in specific local environment and which is cheaper than highbrid seed maize which sometimes are fake in the market. The showcasing also is to counter argument that only imported highbrid seeds are better for farmers. Among the Tanzania national supported initiative by FAO is the Quality Declared Seed (QDS) system. Among the group supported is ZOSEM smallholder farmer group based in Central Tanzania. This group is made of less than 10 farmers but was able to produce annually 15 tonnes on average that could give them about (TZS 15 million about USD 8,000 year 2014/13). This improved lives of the farmers and also provided reliable and better seeds to farming community around nearby districts and regions. ESAFF in the year 2015/16 will explore ways to study other groups nationally supported to produce seed but also enhancement of local seed entrepreneurs that helps to ensure deed sovereignty and helps to create wealth among smallholder farmers.

Efforts to enable farmers to legally own maize seed

On Agriculture research agenda, ESAFF is exploring opportunities to work with research institutions to support farmers to catalogue the seed maize variety that they propagate so that they can register and own it. A smallholder farmer group in Southern Tanzania called Zwayatanga group (A member of MVIWATA) has been engaged with a number of activities since its inception such as multiplication of Maize local seeds known as Ibandawe and Nchancha. The major supporting organisation has been ADP Mbozi, though sometimes in 2008 Agriculture Research Institute (ARI) Uyole worked with the group in Maize research through demonstration plots. Farmers have their own preferences to certain type of seeds.

Farm

ers in Ibembwa mentioned some characteristics as their preference to indigenous seed "Ibandawe" which they multiply and sell even outside their villages and district. It's also

reported that, Ibandawe has gained prominence in some parts Tanzanian Southern Highland of Sumbawanga rural in Rukwa region. The mentioned characteristics [for Ibandawe] include: drought tolerance, disease resistance, palatability, good threshing quality and big cobs.

A study by ESAFF on improving maize seed systems to meet farmer's needs in the southern highlands [July 2013] showed that, farmer's saved seed is the key system for most smallholder farmers (SHF) and the evidence pointed dominance increase over the recent past and continued to do so for the immediate future. During the consultations on the same study, it was noted that, farmers were continuing to grow local varieties because they are palatable. Farmers perceived the germination rates of farmer's saved seed as high [even at harsh weather] because such seeds are available, affordable and trusted by farmers.

In 2015/18 ESAFF will assist a smallholder farmers group - Zwayatanga - in Mbozi – Mbeya, Tanzania towards official release and certification of Ibandawe maize landrace to ensure ownership and recognition through the following stages.

- **Seed preservation**- To facilitate and support the Farmer group to preserve the Ibandawe Maize landrace in the National Plant Genetic Resources Centre (NPGRC) in Arusha and the SADC Plant Genetic Resources Centre (SPGRC) in Lusaka, Zambia
- **Seed Research** – To undertake genetic purification of Ibandawe maize landrace for 2-3 seasons to fix genetic identity and genetic integrity of the candidate cultivar.
- **Variety Testing**: variety testing procedures for adaptability, stability and farmers assessment on Value for Cultivar Use (VCU)
- **Variety Release and Registration**: Application for Statutory testing and variety release protocols as will be advised by TOSCI.
- **Advising on Variety Protection:** Assisting in consulting the Plant Breeders' Right Registrar's Office for PBR protection procedures