

Day ONE [14 September]

Review [progress with implementation of ESA workplan sub-activities]

| Outcome 1. Productivity, diversity, and income of crop–livestock systems in selected agroecologies enhanced under climate variability  |              |   |
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| Output 1.1 Demand-driven, climate-smart, integrated crop–livestock research products (contextualized technologies) for improved productivity, diversified diets, and higher income piloted for specific typologies in target agroecologies |              |   |
| <b>Activity 1.1.1: Assess and iteratively improve resilient crop-crop and crop-livestock integration systems</b>   |              |   |
| Start time   | Presenter    | Sub-activity title  |
| 14:20  | B. Jumbo     | Sub-activity 1.1.1.1: Validation of drought-tolerant maize (DT) hybrids under on-farm conditions in central Tanzania  |
| 14:25  | R. Chikowo   | Sub-activity 1.1.1.2: Investigations on the medium to long term impacts of SI technologies on crop productivity at multi-locational fields  |
|  | R. Chikowo   | Sub-activity 1.1.1.3: Determining the productivity of groundnut as a function of seed generation × variety × density interactions in two contrasting agroecologies, and rotational benefits to maize      |
|  | R. Chikowo   | Sub-activity 1.1.1.4: Exploring productivity of goats under controlled breeding and feeding regimes among young breeding female goats in the crop–livestock system in Malawi                              |
| 14:40  | A. Kimaro    | Sub-activity 1.1.1.5: Determining the productivity and resilience benefits of Gliricidia-based cropping systems   |
| 14:45  | J. Kihara    | Sub-activity 1.1.1.6: Assess the yield, economic and BNF benefits of innovative approaches addressing the pigeon pea and common bean productivity within maize-based cropping system and variable weather |
|  | J. Kihara    | Sub-activity 1.1.1.7: Monitoring the impact of weather and climate variability on the productivity and resilience of maize–legume cropping systems of Kongwa and Kiteto, Tanzania                         |
| 14:55  | L. Claessens | Sub-activity 1.1.1.8: Explore, document, and assess the sustainable intensification pathways of 3 farming system case studies in Tanzania to inform scaling potential.                                    |
|  | L. Claessens | Sub-activity 1.1.1.9: Assessing the impacts of Africa RISING technologies on the performance and resilience of multi-location and differentially exposed farming systems case studies in Malawi.          |
| 15:05 – 15:25  | Discussions  |   |
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| Activity 1.1.2: Evaluate and implement pathways that are effective at improving access to seeds and clonal materials of modern varieties of legumes, cereals, vegetables, forages, and livestock            |                                   |   |
| Start time  | Presenter                         | Sub-activity title  |
| 15:25   | S. N'Danikou                      | Sub-activity 1.1.2.1: Assessment of the benefits of management technologies on the performance of improved vegetable varieties  |
| 15:30 – 15:35   | Discussions                       |   |
| Output 1.2 Demand-driven, labor-saving, and gender-sensitive research products to reduce drudgery while increasing labor efficiency in the production cycle piloted for relevant typologies in target areas |                                   |   |
| Activity 1.2.1: Support local partners through training on appropriate drudgery-reducing technology delivery. No sub-activity was planned for 2019-2020.  |                                   |   |
| Activity 1.2.2: Co-adapt existing mechanization options with target communities   |                                   |   |
| Start time  | Presenter                         | Sub-activity title  |
| 15:35   | E. Swai                           | Sub-activity 1.2.2.1: Use of tractor mounted ripper tillage implement for enhancing soil water infiltration and moisture conservation in semi-arid areas of Kiteto                  |
| 15:40 – 15:45   | Discussions                       |   |
| Output 1.3. Tools (including ICT-based) and approaches for disseminating recommendations in relation to above research products, integrated in capacity development   |                                   |   |
| Activity 1.3.1: Conduct extrapolation domain analysis based on GIS, agroecology, and crop model-generated information to establish the potential of technologies for geographical reach                     |                                   |   |
| Start time  | Presenter                         | Sub-activity title  |
| 15:45   | M. Bekunda on behalf of B. Lukuyu | Sub-activity 1.3.1.1: Farmer/Extension messaging (forage production and use, crop residue processing and use and feed rations) using the MWANGA ICT-Platform                        |
| 15:50   | F. Muthoni                        | Sub-activity 1.3.1.2: Produce regionally relevant extrapolation domain maps for validated conservation agriculture (CA) practices   |
|   | F. Muthoni                        | Sub-activity 1.3.1.3: Produce regionally relevant extrapolation domain maps for validated soil and water conservation practices   |
| 16:00   | J. Manda                          | Sub-activity 1.3.1.4: Ex ante impact assessment with Trade-off Analysis Model for Multidimensional Impact Assessment (TOA-MD) for regional relevance of Africa RISING technologies. |
| 16:05 – 16:15   | Discussions                       |   |
| 16:15 – 16:30   | BREAK                             |   |

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| Outcome 2. Natural resource integrity and resilience to climate change enhanced for the target communities and agroecologies  |                |  |
| Output 2.1 Demand-driven research products for enhancing soil, land, and water resource management to reduce household/community vulnerability and land degradation piloted in priority agroecologies |                |  |
| Activity 2.1.1: Characterize current practices in ESA through identifying formal and informal arrangements for access to and use of water and land resources  |                |  |
| Start time  | Presenter      | Sub-activity title   |
| 16:30   | J. Groot       | Sub-activity 2.1.1.1: Assessing buffer and adaptive capacity to harness resilience of different farm types   |
| 16.35 – 16.40   | Discussions    |  |
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| Output 2.2 Innovative options for soil, land and water management in selected farming systems demonstrated at strategically located learning sites  |                |  |
| Activity 2.2.1: Set up demonstration and learning sites in target ESA communities   |                |  |
| Start time  | Presenter      | Sub-activity title   |
| 16:40   | C. Thierfelder | Sub-activity 2.2.1.1: Lessons from long-term on-station Conservation Agriculture (CA) trials in Zambia   |
| 16:45   | R. Chikowo     | Sub-activity 2.2.1.2: Assessing the benefits of nutrient and water management for climate resilience in Malawi   |
| 16:50   | J. Kihara      | Sub-activity 2.2.1.3: Climate-smart farming practices (soil water micro-catchments, weather informed varieties, cover crops integration [cowpea]) for increasing productivity of the maize-legume system under variable weather conditions |
| 16:55   | A. Kimaro      | Sub-activity 2.2.1.4: Integration of fodder trees and grass forages in dryland farming   |
|   | A. Kimaro      | Sub-activity 2.2.1.5: Evaluation of land rehabilitation benefits of shelterbelts and contours  |
| 17:05   | E. Swai        | Sub-activity 2.2.1.6: Validation of residual tied ridging as a labor-saving technology in the semi-arid areas of central Tanzania  |
| 17:10 – 17:25   | Discussions    |  |
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| <b>Outcome 3. Food and feed safety, nutritional quality, and income security of target smallholder families improved equitably (within households)</b>                             |                          |  |
| Output 3.1 Demand-driven research products to reduce postharvest losses and improve food quality and safety piloted in target areas  |                          |  |
| <b>Activity 3.1.1: Conduct packaging and delivery of postharvest technologies through community and development partnerships with an iterative review, refining, and follow-up</b> |                          |  |
| <i>Start time</i>  | <i>Presenter</i>         | <i>Sub-activity title</i>  |
| 17:25  | S. N'Danikou             | Sub-activity 3.1.1.1: Impact of nutritional messaging on household nutrition, knowledge, attitude, and practices   |
| 17:30  | G. Fischer               | Sub-activity 3.1.1.2: Validating hermetic storage structures and the environment on physical and economic loss abatement in produce  |
| 17:35  | M.Bekunda for C. Mutungi | Sub-activity 3.1.1.3: Nutritional value, safety, and processing quality of produce during storage and utilization by households  |
| 17:40 – 17:50  | Discussions              |  |
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| Output 3.2 Nutritional quality due to increased accessibility and use of nutrient dense crops by farmers improved  |                          |  |
| <b>Activity 3.2.1: Promote and deploy nutrient-rich crop varieties and livestock food resources in target communities</b>  |                          |  |
| <i>Start time</i>  | <i>Presenter</i>         | <i>Sub-activity title</i>  |
| 17:50  | P. Okori                 | Sub-activity 3.2.1.1: Pathways to sustainable adoption of nutrient-dense diets in rural communities of central Tanzania  |
| 17:55  | R. Chirwa                | Sub-activity 3.2.1.2: Promoting farmer production of nutrient-dense (Zn, Fe) NUA45 and drought-tolerant SER83 bean varieties in Malawi   |
| 18:00  | R. Chikowo               | Sub-activity 3.2.1.3: Determining quality and safety of locally produced legume grain-derived complementary foods and adoption in Dedza District   |
| 18:05  | P. Okori                 | Sub-activity 3.2.1.4: Assess the contribution of the farming systems interventions in narrowing the food and nutrient gaps in Kongwa and Kiteto, and the probability of smallholder farmer production to meet them |
| 18:10 – 18:20  | Discussions              |  |
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