Communiqué issued at the end of the International Workshop on Future Resilient Farming Systems for Semi-Arid Region of WCA, held at the Conference Hall, Centre for Dryland Agriculture, Bayero University, Kano from the 27th to 29th September 2016

1.0 Preamble
The International Workshop on Future Resilient Farming Systems for the Semi-Arid Region of West and Central Africa (WCA) was organised by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the Centre for Dryland Agriculture (CDA) of Bayero University, Kano, the International Institute of Tropical Agriculture (IITA), eHealth Africa, the Kano State Government, and the Institute of Agricultural Research, Ahmadu Bello University, Zaria.

2.0 Opening Session
The Opening Ceremony of the Workshop was attended by the Executive Governor of Kano State, Dr. Abdullahi Umar Ganduje, OFR, the Deputy Governor of Kano State, Professor Hafiz Abubakar, the representative of Nigeria's Minister of Agriculture, high level officials of Federal and State Governments, members of Federal and State Legislative Assemblies, the academia from CGIAR Centres, Universities, Colleges and Polytechnics, civil society organisations, captains of industries, farmers, the media and students from several institutions.

The Workshop was declared open by His Excellency, Dr. Abdullahi Umar Ganduje, Executive Governor of Kano State. The opening session was addressed by Chief Audu Ogbeh, the Minister of Agriculture of the Federal Government of Nigeria and Professor Muhammad Yahuza Bello, the Vice Chancellor of Bayero University, Kano. Goodwill Messages were received from Bill and Melinda Gates Foundation, the International Water Management Institute (IWMI), the Vice Chancellor, Ahmadu Bello University, Zaria, the Director IAR, Director, NAPRI, Shika - Zaria and Women Farmers Association of Nigeria (WOFAN).

At the end of the opening ceremony, the newly constructed office Complex of ICRISAT was commissioned by the Executive Governor of Kano, accompanied by high level dignitaries and officials of the Federal and State Governments and stakeholders.

3.0 The Presentations
Papers at the technical sessions covered diverse issues of crops-livestock systems in WCA. The first technical session involved the presentation of two keynote papers: Feeding Africa in the 21st Century: Challenges and opportunities was presented by Dr. Macki Tall on behalf of Mr. Bukar Tijjani, Africa Representative, FAO, Accra, Ghana; and sustainable intensification of crop-livestock system in the drylands of West Africa was presented by Dr. Tim Olalekan Williams, Director, Africa, International Water Management Institute (IWMI).
Papers in the second technical session on present and future drivers of crop-livestock value chains in WCA included experiences and lessons learnt from past crop-livestock interventions, impact of agricultural research and development on livelihoods, capacity for crop-livestock systems research, demand for cereals and grain legumes, demand for livestock and livestock products, and crops-livestock markets. In the third technical session, papers on appropriate technologies for future resilient crop-livestock systems in the face of increasing human and livestock populations and changing climate, research and development priorities for WCA, livestock research for future resilient farming systems, challenges and opportunities in farming systems research and feeds and feeding systems were presented.

The fourth technical session was on options for scaling out/up of crop-livestock technologies in WCA. Papers presented included mainstreaming gender, vulnerable and marginalised groups, advances in delivery of large scale delivery/dissemination of agricultural technologies, scaling out/up of agricultural technologies, E-tools for agriculture, nutrition and health delivery, inclusive business development and role of ICT in agricultural technology dissemination. The fifth technical session focused on decision support tools for agricultural technology development and delivery. Papers presented were on developing user-defined decision support tools for agricultural systems, managing climate variability and change and future scenarios to inform re-engineering research and development process.

All papers presented were discussed by participants, contributing and providing additional perspectives on the issues. At the end of each technical session, group discussions were held to further examine the issues and challenges and to explore viable options for research and development in the forthcoming years. Potential strategies and technologies including innovation platforms that can be harnessed to support the achievement of sustainable crop-livestock systems for WCA.

4.0 The Workshop Noted the Following:
From the presentations, deliberations and group discussions, the Workshop noted the following:
   i. The efforts of the Governments of WCA countries, the AU, the regional economic blocks, international development organisations, international research centres, universities, civil society organisations and the private sector in supporting agricultural research and development over the years;

   ii. That WCA countries are witnessing rapid population growth associated with rising poverty, food insecurity and increasing conflicts over access to, and use of natural resources;

   iii. The FAO strategic framework for resilience in agricultural systems aimed at achieving the global goal of eliminating poverty, reduction of hunger and malnutrition
iv. The smallholder farmers (SHFs) produce about 80% of the food in SSA under crop-livestock systems, but this is limited by low productivity due to weak extension, low input, insufficient access to water, diseases, weeds, pests and poor access to finance and markets;

v. That there are about 90 million resource-poor livestock keepers constituting some 36% of West Africa’s population, with 80% practicing mixed crop livestock/agro-pastoral systems;

vi. There are inadequate funding for agricultural development and weak policies in most WCA countries for the management of natural resources and coordination of sustainable resource utilisation;

vii. There is a growing demand for crops and livestock products in WCA and changes in the structure of the demand for food which are driven by increased per capita income, rapid urbanization and changing diets and preferences;

viii. There is serious price volatility of major agricultural produce and natural resources associated with marketing of agricultural produce;

ix. Challenges of managing pastoralism and dealing with the issues of conflicts between pastoralists and farmers

x. That climate change is a major challenge to agricultural production and attainment of food security;

xi. There is inadequate synergy between research and policy, and

xii. There is low participation of women and youths in agricultural extension, thereby limiting service delivery to women in key value chains.

5.0 The Workshop recommended:

i. The need for adoption of policy dialogue platforms based on evidence-based research findings involving producer organisations, civil society groups, market actors, processors, ICT service providers, the media, researchers and extension workers, among others;

ii. Increased funding for research and development among all partners, including governments, private sector, international donor agencies and other international and local support groups.

iii. The need for higher synergy through multi-disciplinary research to develop sustainable pathways for crop-livestock integration and adoption of better management practices, including climate-smart farming systems;
iv. Strengthening of feedback mechanisms for monitoring agricultural technology to consistently support farmers improve productivity and access quality markets;

v. Increased investment for sustainable intensification of smallholder mixed crop-livestock systems through effective land use planning and efficient management of essential resources including soils, water, and pastures;

vi. Strengthening synergies between researchers, policy formulating institutions, the private sector and farmers in research and development to achieve sustainable crop-livestock systems;

vii. Support the research and development of market-driven innovation platforms linking all actors along the value chain;

viii. Support research for digitalization of agricultural processes and information sharing among diverse stakeholders in research and development;

ix. Support research and development for dissemination of improved technologies using applicable platforms including ICT, face to face extension service delivery;

x. Strengthen support for interventions in community education and gender mainstreaming for effective women and youths participation in sustainable crop-livestock systems; and

xi. The need for research and innovation platforms to be backed by appropriate legislations to provide legal framework for sustainable implementation.

6.0 Appreciation

The Workshop appreciated the Kano State Government under the leadership of His Excellency, Dr. Abdullahi Umar Ganduje, the Federal Government of Nigeria, the Federal Ministry of Agriculture, Bayero University Kano and all the partners that organised the Workshop, the papers presenters, chairpersons of the technical sessions and all participants that enriched the deliberations of the Workshop over the three days.

Ignatious Angarawai
ICRISAT

Saleh B. Momale
CDA - BUK

For: Ajeigbe, A. Hakeem

For: Prof Jibrin M. Jibrin
Director, CDA - BUK