

Report of Zonal Discourse on Strengthening of CSA-TIMPs knowledge and uptake in South-East Agricultural Zone of Nigeria: Opportunities, Challenges and prospects held on 11th February, 2021 at Michael Okpara University of Agriculture Umudike, Abia State.



Nigeria' 2020 population was estimated at 206,139,589 people at midyear according to UN data. Nigeria population is equivalent to 2.64% of the total world population. Agriculture is the mainstay of the economy. It employs about two-thirds of the country's total labor force, contributing about 40% of GDP and providing the means of livelihood for over 70% of the population. Majority of our farmers are small holder farmers who are seriously faced with the threat of climate change, further increasing the competition for land, water and other inputs for food production thereby exploiting further the already deteriorated environment and increasing

the food insecurity issues in the country. Almost one billion people go to bed everyday hungry. Other challenges include low infrastructural facilities, insufficient funding, heavy post-harvest losses, gender inequality, poor research-extension-farmer linkage but to mention a few. Although efforts have been made to salvage these challenges through food security related programmes, achieving food security still remains a mirage if climate change issues are not addressed through the promotion and uptake of climate Smart Agriculture (CSA). CSA is the integrated approach of managing landscapes to help adapt agricultural crop production methods to ongoing human-induced climate change challenges. It involves farming practices that improve farm productivity and profitability, helps farmers adapt to the negative effects of climate change and mitigate the effects of climate change so as to achieve food security. It is an attempt to complement government effort to achieve food security through CSA Technology Innovation and Management Practices (TIMPs) Knowledge and uptake that the Nigerian Forum for Agricultural Extension and Advisory Services (NIFAAS) in collaboration with NIFAAS Lead organization members held this policy discourse on the 11th day of February 2021 at MOUAU Extension Centre (MEC). The overall goal of NIFAAS is to develop and promote a coordinated, inclusive and demand-driven agricultural advisory support and service network in Nigeria.

The discourse was well attended by fifty participants from different States in South Eastern Zone. Amongst those in attendance were the National President of NIFAAS Professor E.B. Tologbonse, ably represented by Professor Ike Nwachukwu the national vice President south east and also director MOUAU Extension Centre (MEC), The resource persons in attendance were Professor Nkiru Meludu who joined virtually, Dr Kenneth C Ekwe, Deputy director , centre for entrepreneurship MOUAU, NIFAAS coordinator climate smart agriculture South East zone Dr Ogechi Umeh, the Permanent secretary office of the deputy governor and director of extension ,

Anambra state , Mrs Ify Uzoka. Former program manager Imo state ADP. Pastor Anayochi Jonathan FADAMA Abia state coordinator Mr Ibe Maduakolam, and Director of extension, Abia ADP Mr Kenneth Enyinnaya and a host of others.

Prof. Ekwe made the first presentation on climate smart agriculture (CSA) Technologies, Innovations and Management practices (TIMPs). Five panelists were present for the panel discussion which was moderated by Dr. Chikaire J. from Federal University of Technology Owerri (FUTO). The event was reported by Dr. Rachel Nwakwasi from FUTO and Dr (Mrs) Ahamuefule from MOUAU.

The discourse on the state of CSA TIMPs knowledge and uptake in the zone among others were:

- i. Farmers in SE Nigeria practiced elements of CSA technologies not consciously CSA practices but rather as practices aimed at improving production/food security, while invariably enhancing adaptation and mitigation. They do not have documented evidence of these practices because of the fact that some of their adaptation strategies are based on their indigenous local knowledge and experiences. They practice, mixed farming practice e.g. Poultry, fish pond and crop farming. The poultry dung serves as feed for the fish while the polluted pond water serves as manure for the crops. Planting of cover crops to increase soil fertility e.g. legumes adjustment of planting dates. Use of drought resistant varieties. Others are the incorporation of residues or other mulches reduces wind and soil erosion, increases water retention, and improves soil structure and

aeration Use of drought resistant varieties, use of improved varieties tolerant to climate change stressors e.g. rice and maize hybrids

ii. Ernest efforts have indeed been committed towards promoting, popularizing and dissemination of the CSA TIMPs by the relevant agricultural development partners in the zone all intended to ramp up their knowledge/awareness with the view of facilitating their adoption by end users. There was a time in the past when funds were made available by governments and external fund donors (especially World bank and FAO) for support of agricultural development in Nigeria. During this time agricultural stakeholders worked assiduously towards achieving the goals of the sponsorship. Specifically, the NRCRI, Umudike having the mandate for the coordination of REFILS in the zone technically backstopped other stakeholders in the system especially the Agricultural Extension agencies (the ADPs) to promote the knowledge of diverse agricultural technologies in the zone.

iii.

The MOUAU through her extension centre(MEC) equally got involved in dissemination of Best-bet agricultural innovations and practices to farmers within her catchment area in conscious efforts to promote their knowledge and stimulate uptake by the farmers. In doing this, several extension methods were employed to effectively deliver the TIMPs to the end users including use of the electronic and print media,

training workshop, technology review meetings, field and home visits by extension agents, field days, etc.

The results of these efforts were high profile knowledge of the TIMPs. Thus farmers were sufficiently informed. While the funds were available the efforts were sustained. Also, while the knowledge promotion was sustained, there was a corresponding rise in the uptake of the various TIMPs by the end users in the zone. Farmers were vividly supported to adopt the TIMPs through offering of several incentives such planting materials, agro-inputs as well as close monitoring.

Challenges to CSA Uptake in the zone

Uptake of CSA TIMPS has however been hampered by increased state of food insecurity and extreme hunger thereby encouraging more farmers to plant with fertilizer for faster and robust yield notwithstanding the adverse effect of prolonged use of fertilizer on soil in the incidence of climate change.

Uptake of CSA-TIMPs entails certain initial cost. Lack of access to credit facilities and agro input subsidy has not augured well for both the promotion and uptake of CSA.

Factors Militating against the integration of CSA into Policy in the zone

CSA faces a number challenges related to the conceptual understanding, practice, policy environment and financing of the approach.

- The government has not consciously facilitated the promotion and rapid uptake of CSA TIMPs knowledge as a result of low interest that they have in its increased uptake

- Lack of practical understanding of the approach.
- Lack of data and information and appropriate analytical tools at local and national levels.
- Lack of adequate investment in CSA at the farm level. .
- Inadequate coordinated, supportive and enabling policy frameworks.
- Socioeconomic constraints at the farm level. s) and other climate changes.
- Inadequate empowerment of women and youth.
- Lack of adequate and innovative financing mechanisms and effective risk-sharing schemes.

Presently, there is **NO** identified policy or practice that has/have integrated CSA issues in the state

Actionable roadmaps to increasing CSA TIMPs Uptake and integrating it into policy and practice

Promote and facilitate wider adoption by farmers of appropriate CSA technologies through capacity enhanced public /private extension system;

To develop institutional arrangement to support, apply and scale out CSA from the farm level to agricultural landscape level;

Ensure policy frameworks and public investments which are supportive of CSA;

Develop and implement effectively sharing schemes to empower farmers and enhance uptake of CSA technologies.

CSA TIMPs Policies

- Government will offer a range of attractive incentives to farmers who are CSA TIMPs uptake compliant
- Government will maintain equity on the distribution of and disbursement of incentives to farmers in the different parts of the country.
- Government will provide an appropriate framework that would improve farmer – extension – research linkage to improve feedback which would illicit the desired action on CSA (CSA TIMPs) technology , innovation , and management practices uptake.
- Both governmental and nongovernmental organizations should encourage farmers to insure their farms also , their requirement should be scaled down to accommodate more small holder farmers, so as to encourage more CSA (CSA TIMPs in various

- There should be an operational climate information service center or station for farmers in each state, this will enable extension staffs to work effectively with farmers in a participatory and facilitating manner and to support their decision making and planning that takes into account of local climate together with other constraints and opportunities that farmers have.
- In view of the foregoing, Extension services (public and non-public) in the zone would need foundation training to acquire core proficiencies in CSA from management levels, through specialists, to local field personnel.
- The introduction of Soil Subject Matter (SMS) specialist

Opportunities

- Natural and human resources. SE Nigeria holds high potential in natural and human resources that can be grasped through the provision of policy and fiscal incentives for the promotion of sustainable CSA approaches.
- The zone has vital research networks and linkage needed for development of CSA best practices that will technically support intensification of cropping systems, increasing efficiencies in agricultural production systems, conservation of soil and water resources, and adaptive management of natural resources at both farm levels to achieve increase in agric productivity and building resilience against climate change effects.
- Existence of several TIMPs well suited to the farming and food systems of the households in the zone. The massive agro technologies developed by the research and universities which attend to the various field

challenges in the zone are yet to be utilized. This is the time to promote them for uptake

In conclusion, considering the sensitivity of the prevailing farming systems to extreme weather conditions it becomes expedient to promote and facilitate wider uptake of CSA TIMPs by farmers, especially owing to the fact that they have unconsciously practiced it in the past in the zone. It will therefore be practical that proven climate-smart, context-driven approaches and solutions be promoted with the policies already stated above. This will therefore require investing in developing more new climate sensitive technologies that target addressing specific climate change hazards as well as creating enabling environment that enhance and facilitate uptake of CSA TIMPs.





