

Creating Agricultural Training Audiovisual Content to Improve Quality Impact for Farmers and Other Stakeholders

David O. Ojo

Research Director, NIHORT, PMB 5432, Idi Ishin, Ibadan, Nigeria.

Email: ojo.david@nihort.gov.ng

Received 06 August 2024; revised 05 September 2024; accepted 05 November 2024

Abstract

Too seldom do third world policy makers consider learning in their own native languages compared to foreign languages for farmers' training - especially for agricultural food security development. This presentation therefore shares decades of acquired knowledge, around the globe, on how to improve quality impact for farmers/stakeholders capacity development purposes using "farmers helping the farmers" model approach. Challenges of training audio visuals to impact farmers learning; as well as benefits of creating video/audio contents in farmers own languages are discussed. Opportunities for improving agricultural extension outreach research impact and collaboration with the international community through the Committee Linking Entrepreneurship-Agriculture-Development (COLEAD) and Access Agriculture None Governmental Organizations (NGOs) are highlighted. Presented as well are downloadable demonstration agricultural training videos; created to improve quality impact for farmers and other stakeholders' easier technology adoption, even in situation of electricity supply failure. All that is needed is to translate our research findings/words into action by training farmers/stakeholders in local languages videos/audios.

Keywords: Training policy, Video audiovisual, Research impact, Extension

Introduction

Rarely does third world policy makers consider learning in own native languages compared to foreign languages for farmers' training - especially for agricultural food security and development (Oyegbile and Olutegbe, 2023; FMARD, 2019; Parvizian, 2011; Van Mele, 2011). Achievements abound among other audio visual achievements in rural areas of Africa and Asia. Over 90 million farmers and stakeholders have been reached, and still counting; 97% adoption of green technologies, 60% women was economically empowered and 150% higher chance of additional income (Ojo et al. 2009, 2011; David, 2024; 2019; Access Agriculture, 2024ab).

This article therefore informs on decades of acquired knowledge, on how to improve quality impact for farmers and stakeholders, in agricultural capacity development using farmers-helping-farmers model approach. The benefits and challenges of creating video and audio contents for training to impact farmers learning in own languages are discussed.

The challenge of impacting farmers starts with the experts who get their priorities but not those priorities of the farmers (Ojo et al. 2009; Ojo et al. 2011). Experts fail in stimulating local farmers to start looking for local solutions to common problems that farmers face. Farmers and Stakeholders crude means of

learning needs modernization. Despite the challenges, the usage of video and audio tracks in local languages, by radio and television stations for maximum impact, improve opportunities for farmers/stakeholders. For instance, drawing on local knowledge for bringing in innovative sustainable solutions can often be found at cheaper cost; would improve livelihoods of rural communities through sustainable agricultural practices and entrepreneurship (David, 1997). Besides, Access Agriculture NGO/COLEAD/NIHORT collaborative opportunities offers extension impact opportunities.

Opportunities abound in the usage of video and audio tracks by radio, television and e-media stations for maximum impact in improving farmers/stakeholders learning. Drawing on sustainable local knowledge for innovative solutions can often be found at cheaper cost that would improve livelihoods of rural communities through sustainable agricultural practices and entrepreneurship (Ojo, 2024; 1994; COLEAD, 2023). This advantage could further be strengthened through institutes such as Access Agriculture/NIHORT/COLEAD Collaborative Opportunities that offers extension impacts.

Highlighted herewith are opportunities for improving research and extension impart as well as collaborative linkages with Access Agriculture NGO and COLEAD international community. Presented as well are downloadable agricultural training video links for demonstration to stakeholders, created to improve quality impact for farmers and stakeholders, even in situation of electricity demand and supply failures. All that is needed is to translate our research findings into action by training farmers and stakeholders in local languages videos and audios for quality impact.

The objective of this presentation therefore is to inform stakeholders, regarding decades of acquired knowledge around the globe, on how to improve quality impact using the farmers-helping-farmers in local languages model approach for learning farmers and stakeholders' food security capacity development purposes. The benefits and challenges of creating video and audio contents for training to impact farmers learning in own languages are herewith discussed.

Methodology

Improving quality learning impact for farmers and other stakeholders, especially in situation of electricity supply failure, agricultural training videos/audios creation need be stepwise:

- I. Made with good extensionist research.
- II. Involving the farmers/stakeholders, such that a script can be written and then checked by experts.
- III. Script should feature just one or maybe two training points.
- IV. Script has an introduction.
- V. The main part of the video should include interviews with the farmers/stakeholders.
- VI. A close ups of actions to follow, and
- VII. A summary.

These desired script/audio/video qualities are captured in demonstration clips available online in many languages as presented in Figures 1 and 2 for research and extension training purposes. Someone may ask: "What happens in a situation of no electricity supply, internet signal or phone signal to improve the quality training impact for farmers and stakeholders"? That is where the use of smart projector of Access Agriculture will be helpful. The Projector is a solar recharged smart projector, so learners can hear in their language and see all the website videos in a storage device made available by Access Agriculture, in even the most remote part of the world particularly in Nigeria case study. This is demonstrated as presented in Figures 2 and 3.



Figure 1: Access Agriculture Drip Irrigated Tomato Demo
 English-<https://www.accessagriculture.org/drip-irrigation-tomato>;
 Arabic-<https://www.accessagriculture.org/ar/ry-ltmtm-bltnqyt>;
 Yoruba- <https://www.accessagriculture.org/node/3258>

Results and Discussion

Achievements abound among audio visual achievements in rural areas of Nigeria; 97% adoption of green technologies, 60% women was economically empowered and 150% higher chance of additional income (David, 2024; 2019; Access Agriculture, 2024ab). Our findings are as summarized in doing a smart projector demonstration when there is no electricity, internet signal or phone signal (David, 2019). This is the situation of the third world and developing countries particularly in Nigeria with the majority of farmers and stakeholders resources-poor (David, 1997; Muthayya et al. 2023; Ojo et al. 2009; 2011; Ojo, 1994; David, 2024, 2019; NIHORT, 2021; NIHORT 2010 - 2023). The lead author smart projector prize will be helpful, being a global Access Agriculture NGO ambassador. The prize is a solar recharged smart projector, so farmers/stakeholders can hear in their language and see all of the videos on the website on portable drive; even in the most remote parts of the world. The smart projector and website portable drive usage is demonstrated in the training clip ‘Making Fertile Soil for Onion Demos (Figures 2 and 3).



Figure 2: Access Agriculture Solar Smart Projector
 English Demo - <https://www.youtube.com/watch?v=Ve4tNloCv-U>
 French Demo - https://www.youtube.com/watch?v=ZmoMs_0B234



Figure 3: Access Agriculture Making Fertile Soil for Onion Demo

English-<https://www.accessagriculture.org/how-make-fertile-soil-onions-0>;

Arabic-<https://www.accessagriculture.org/ar/kyfy-thdyr-trb-khsb-lzr-lbsl>;

Yoruba- <https://www.accessagriculture.org/node/4078>.

Conclusion

It is on this recommendation note that I therefore introduce Access Agriculture NGO to Nigerian Farmers and Stakeholders; and wish pursuit of communicating our research technologies to farmers in their local languages, here in Nigeria and elsewhere in order to achieve greater innovative technological impact (Ojo, 1994; Okry et al. 2014; David and Connaughton, 2019; Ojo, 2015; David et al. 2021). NIHORT has great archives of training documentations for local languages audiovisuals in Fruits, Spices, Floriculture/ornamentals, vegetable etc. programs to showcase for farmers productivity here in Nigeria and other countries (Ojo et al. 2009; NIHORT, 2021; NIHORT 2010 - 2023). All we have to do is translate words into action as audiovisual improves learning, facilitate implementation processes the faster, makes communicating and adoption of innovative technologies quicker and easier.

Recommendations

- a. -Do more “farmers helping farmers” in local languages videos/audio by identifying video gaps locally and among the available videos worldwide.
- b. -Ensure majority of NIHORT/Institutions/Stakeholders on-shelve video technologies are translated in local major languages.
- c. -Ensure intra-institutional collaborations for videos/audio creation and training impact.
- d. -Getting our interests registered with donors for sponsorship fellowships with the international community like Access Agriculture NGO to get our needs met.

Acknowledgements

This research was funded by Access Agriculture NGO (Belgium/UK), the FGN through the NIHORT research support. Thanks as well to the CEO of NIHORT past and present, Dr. Abayomi Olaniyan and Dr. Lawal Attanda respectively and their management team. ; Dr. L.O. Olajide-Taiwo (NIHORT) for reviewing and editing the manuscript. Colleagues (the farmers helping farmers and stakeholders) for their generous assistance, mentoring, editing and advice during the course of project execution.

References

- Access Agriculture. 2019. Winner of Smart Projector holds National Seminar in Nigeria. An Access Agriculture social media news. Available online <<https://www.accessagriculture.org/news/winner-smart-projector-holds-national-seminar-nigeria>>
- Access Agriculture. 2024a. Training on the use of Smart Projector Facilitated by Access Agriculture. Available online - https://www.youtube.com/watch?v=ZmoMs_0B234
- Access Agriculture. 2024b. On the road with the smart projector - GADC Uganda. Available online: <https://www.youtube.com/watch?v=Ve4tNloCv-U>
- COLEAD. 2023. FFM+ programme in Nigeria. The Committee Linking Entrepreneurship-Agriculture-Development (COLEAD) COLEACP's Fit for Market + programme aimed at mitigating the impacts of the Covid-19 pandemic by strengthening the sustainability of the horticultural sector. Available: <https://youtu.be/fgE-wL2tJ6c>
- David Ojo. 2019. Creating an Audiovisual for quality impact to farmers and other stakeholders. Seminar delivered at the Nat Hort res Inst HQ., Ibadan, Nigeria<<https://youtu.be/1Q9nquLTKyg>>
- David Ojo. 2024. Hidden Hunger Alleviation in Nigeria: Perspective on Intelligent Models. An invited institutional national seminar delivered at the Nat Hort Res Inst HQ. Ibadan, Nigeria. Available online: <https://youtu.be/X-htfWPLSY>
- David, O. and Connaughton, M. 2019. Climatic adaptation strategy under urban agriculture rainwater cropping systems: a case study from watermelon (*Citrullus lanatus*) as live mulch. *Acta Horticulturae* 1257, 169-174.
- David, O. Ojo, T. Atobatele and Jonas, N. Chianu. 2021. Integrated harvesting techniques for African egg plant (*Solanum macrocarpon* L., cv. Igbagba). https://youtu.be/qq47p_p0Qgw
- David, O. Ojo. 1997. Effect of weeding frequencies on grain amaranth growth and yield. *Crop Protection* Vol. 16, No. 5, pp.463-466.
- FMARD (Federal Ministry of Agriculture and Rural Development). 2019. Nigerian Agricultural Statistics, Local Trade Shows. AgrikExpo West Africa, September 17-20, 2019. International Conference Center, Abuja, Nigeria. Available online at: <https://vimeo.com/266472602>.
- Muthayya, S., Rah, J. H., Sugimoto, J. D., Roos F. F., Kraemer, K. 2023. The Global Hidden Hunger Indices and Maps: An Advocacy Tool for Action. *PLOS ONE* 8(6): e67860. <https://doi.org/10.1371/journal.pone.0067860>; <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0067860>
- NIHORT. 2010 - 2023. National Horticultural Research Institute (NIHORT) Annual Reports 2010 - 2023. NIHORT, Idi Ishin, Jericho GRA, Ibadan HQ, Ibadan, Nigeria <www.nihort.gov.ng>
- NIHORT. 2021. Tomato value addition audio-visual training video.____Available online: <https://youtu.be/qgOsJTMU9PA>
- Ojo, D. 2015. Hunger Alleviation in Africa: Perspective of a Horticultural Agronomist. *European Journal of Nutrition & Food Safety*, 5(5), 1135. Available online: <https://doi.org/10.9734/EJNFS/2015/21285>
- Ojo, D. 2024. Creating Horticultural Training Video/Audio Content to Improve Quality Impact for Farmers and Other Stakeholders. A presentation at the Univ. of Lagos, Nigeria, on the occasion of the Nigerian Academy of Science (NAS 5th Scientific Conference 23 - 24th Jan. 2024). University of Lagos, Lagos, Nigeria.
- Ojo, O. D., L.O. Olajide-Taiwo, and S.O. Afolayan. 2011. Assessment of irrigation systems for dry season vegetable production in urban and peri-urban of Southwestern Nigeria. *African Journal of Agricultural Research* Vol. 6 (2), pp. 236 – 243, 2011.

- Ojo, O. D., M. Connaughton, A. A. Kintomo, L.O. Olajide-Taiwo, and S.O. Afolayan. 2009. Assessment of irrigation systems for off-season vegetable production in urban and peri-urban zones of Southwestern Nigeria. *Journal of Rural Development*, 42(2), pp. 53 – 65.
- Ojo, O.D. 1994. Africa's economic growth and external debt. Newsletter - The International Communication Project (Germany). Aug. 1994, Pages 8-10. ISSN 0943-2029.
- Okry, F., Van Mele, P., & Houinsou, F. (2014). Forging new partnerships: lessons from the dissemination of agricultural training videos in Benin. *The Journal of Agricultural Education and Extension*, 20(1), 27-47.
- Oyegbile, A. and Olutegbe, N.S., 2023. Effect of video-mediated extension on stakeholders' propensity to participate in maize-grain-poultry-feed agribusiness cluster in Oyo state, Nigeria. *Journal of Agricultural Informatics*, 14(2).
- Parvizian, F. 2011. Studying the possible impact of agricultural audiovisual programs on farm productivity. *Journal of American Science*, 7(4).
- Van Mele, P., 2011. Video-mediated farmer-to-farmer learning for sustainable agriculture. A scoping study for SDC, SAI Platform and GFRAS, pp.1-47.