UNDERSTANDING MARKETS IN TESO REGION, EASTERN UGANDA: ESTABLISHING AGROECOLOGY MARKETS LINKAGES FOR LOCAL AGROECOLOGY ACTORS

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ABSTRACT

Based on the McKnight CCRP-FRN Project in Eastern Uganda, the need for viable Agroecology business markets was realized. Using the CCRP-FRN developed AE business assessment tools package (Ssekyewa et al., 2022 in draft report), sample markets in Eastern Uganda were studied. Identified markets were categorized as open weekly markets and permanent daily markets. Characteristics of either markets were determined. These characteristics were used to analyse markets for their social, environmental and economic values as well as for their strengths, weaknesses, opportunities and threats towards being Agroecology business markets. On average weekly open markets in Teso region were 53% agro-ecological and so far less than being agroecology businesses. Study findings were used as basis for recommendations towards developing a mechanism for Agroecology business actors to access these weekly and daily markets.

Key words:
Agroecology business, actors, markets, assessment tools, strengths, weaknesses, opportunities, threats

INTRODUCTION

Weekly open markets, taken also to be periodic markets, were referred to by Hodder (1965) to be organized public gatherings of buyers and sellers of commodities meeting at an appointed place at regular intervals. Mitz (1971) considered such markets occurring on particular days on a regular basis to have an internal marketing system.

CERD-UGANDA identified weekly open markets in Eastern Uganda through involvement of Collaborative Crop Research Programme-Farmer Research Network (CCRP-FRN) project actors in the region. Identified markets were visited from the 13th June to 20th June 2022. This activity builds on previous FRN agroecological business models developed by the CoP and consultants – around Circular and Solidarity Economy and the sweet spot between Social, Environmental and Economic/Business values. Projects in eastern Uganda identified creating business models as a priority area during their joint inception meeting, and as such establishing market linkages is key to their business. Existing agricultural markets offer a starting point for understanding market dynamics that would influence establishment of Agroecology markets in the region. The question is about lessons to be taken from existing markets and the possibility of existing markets accommodating agroecology business. Through such weekly open markets farmers and traders meet and share information as well as cementing their cultural relations as was reported among Wolof small farmers in Senegal (Dona, 2000), hence building on the social aspect of the market. Such markets are also venues for acquiring new information from outside their locations. Open air markets, which are similar to weekly open markets in Eastern Uganda were reported by Hannah Corrie and Tom P. Evans in 2022, to be sources of food for the low-middle income urban population in sub-Saharan Africa, and so they bring about inclusiveness where by all categories of people still access food for their wellbeing. These markets were seen to have no organized methods as those in supermarkets. Corrie and Evans recommended the need to identify purchasing patterns in these urban related food systems for better planning. In this study we identify agroecology characteristics of these weekly open markets, so as to build linkages with CCRP-FRN Agroecology business models.

Methodology

Given the vast nature of the Eastern region, and the multiplicity of markets, we took samples of existing markets as provided by David and Isaac of CCRP-FRN Sorghum Project among others identified by ourselves while traveling through the Teso region. Sample markets were studied by either physically visiting or collecting primary qualitative data or by getting secondly data about them from local informers. Qualitative data was collected through interviews guided by the previously developed Outlets AE business tool (Ssekyewa et al. (2022)/appendix I or by observations of the social, environmental and economic values.

Figure 1 Cases of AE Outlet business tools used to assess physically visited markets (Appendix I)

Four weekly markets and two permanent full time markets were physically visited. Furthermore, secondary data was got about three other weekly markets in the region without visiting them, but by interacting with local stakeholders. For every visited market an AE business tool was directly populated with collected interview and observation data. Some photos were also taken to illustrate certain aspects of the weekly open market.

Information collected was analyzed for weekly open markets having social, environmental and economic agro-ecological values as well as for their strengths, weaknesses, opportunities and threats (Ghazinoory et al., 2007; Ghislain et al., 1999) in relation to Agroecology business social, environmental and economic values as outlined in the AE business assessment tool (Ssekyewa et al. 2022)in appendix I. Underlying causes/cause effect analysis (Ishikawa, 1990), which involved identifying weaknesses or threats as components of the SWOT, finding out major factors likely to cause it and possible causes leading to those factors, was conducted. The deep understanding of causes of weaknesses and threats generated data on immediate causes, secondary causes and primary/root causes. The strengths and opportunities were used to generate lessons from this study. An immediate cause was considered to be the obviously seen. The secondary cause was taken to be at an inner level of the immediate cause while the primary/root cause was one that is deep, invisible, yet it is the real source of the observed weakness or threat.

Results

A total of 9 markets were identified and considered in the Teso region, Eastern Uganda. Of these 6 markets were physically visited to collect primary data, while for the remaining 3 markets secondary data was collected from respondents without visiting the market. Of the 6 visited markets, 67% were weekly open markets and 33% were full time permanent markets. Weekly open markets identified and visited were,

1. Kasilo market in the North West of Serere District towards Lake Kyoga shores, and operates on Tuesdays
2. Ocaapa market in the South of Serere District towards Kumi, and operates on Wednesdays
3. Arapai market in the East of Soroti, Arapai District, and operates on Thursdays

4. Ocori Modgmin market East of Katakwi District, and operates on Fridays

Whereas identified permanent full-time markets visited were,

1. Soroti Central market which is a full time market
2. Popular Women Knowledge Initiative (PWKI) which is located in Bukedea TC, Bukedea District.

Primary data was collected from all physically visited markets. On the other hand, secondary data was collected from respondents without a physical visit to Bukedea weekly market which opens on Mondays, as well as Kumi and Kachumbala markets which open on Saturdays.

Both primary and secondary data showed that all weekly open markets were of the same design and managed in the same way by local governments, but with variations observed on quantity of agricultural produce stocked by venders and overall market physical size. In situ, observed estimates of cereals like millet grain stocked by a vender ranged from about 5kgs to about 50kgs. Regarding physical space, the biggest observed market was Ocori Modgmin which stretched to about 5ha. It was noted that weekly open markets had no permanent buildings other than the toilet facility. Stalls were make shift, and with all agricultural products sold at ground level. They also had no perimeter fencing, and were located out there in broad open peri-urban or rural space.

AGRO-ECOLOGICAL BUSINESS CHARACTERISTICS OF WEEKLY MARKETS

Walking through these markets data was picked either by interviewing a sample of venders or by observations. Where possible, local market leaders were also engaged to confirm information from individual venders and that collected by observations.

Figure 2 Cereal venders in an open weekly market in Eastern Uganda

Subsequently, collected information was categorized into strength, weaknesses, opportunities and threats in regard to the social, environmental and economic values.
Strong aspects identified in physically visited weekly open markets and from the social, environmental and economic agroecology perspectives are presented in table 1 below. Thus, open weekly markets were 83% socially Agro-ecological (Table 1). They only missed characteristic aspects of traceability which include an in built feedback mechanism, coding system for business entities, standard labelling of goods, and direct provision of consumer information.

As indicated in table 1, weekly open markets had 32% observation of agro-ecological environment aspects. They mostly lacked in polythene waste management and so sanitation, in integrating synthetic chemicals within the agricultural commodities market area, and unsafe use of these chemicals on commodities such as tomatoes, plus bringing vehicles and motorcycles into the market area unfair charges levy to agricultural commodities venders, and lack of consideration for health and care aspects of those working in these markets.

Economically, weekly open markets were 44% AE business from the economic perspective (Table 1). Their agro-ecologically economic quality was affected by inadequate feedback mechanisms, accounting system, records and documentation, business planning, safety, prevention of pollution, lack of separation of agro-ecological goods from others, due

to their pseudo loose/make-shift nature. Polythene bags were commonly used and disposed-off randomly. It was observed that even where they had economic values, the evidence was not 100% compliant. On average, weekly open markets were 53% agro-ecological.

Table 1 Assessment of weekly open markets (WOM) against AE business characteristics /values

AE Values	Data on WOM Agro-ecological characteristics/values	% AE
Social		83%
Systems principles; co-creation and sharing of knowledge; Components' synergy and interactions; social-cultural values; traceability; inclusivity	Complementary business groups of different types of inputs	
	Inclusive markets with gender sensitivity (Men, women, Youth) and shared roles with women selling crop commodities; with a management structure and leadership	
	Women venders often in groups and closely interacting	
	Land was allocated by local governments and so ownership assured	
	With management that coordinates general market activities	
	Both indigenous and improved consumer oriented varieties / commodities sold in the market such as millet, sorghum, maize flour, dry cassava, econg (white ants), ecodoi (spider flower), ebo (Cow peas) as well as locally fabricated tools	
	Participation and co-creation as goods are supplied by farmers or middle persons, and then bought and stocked by local venders, as those from especially permanent markets come to buy and take to their market stalls, and consumers take for home use.	

Environmental		
Responsible land governance; Biodiversity conservation and synergies; Sanitation maintenance; Human resources welfare and health; Synthetic in puts reduction/elimination;	Markets located on land provided by the local authority	32%
	Land allocated out of busy congested and polluted urban settings	
	Had a stalls allocation system to prevent conflicts over space	
	Have a waste management system and toilet services	
	Claim of cereals being produced without spraying by Cereal venders (Figure 1)	
	Trees conserved for shade and grass left between paths	
	Biodiversity of commodities including indigenous ones are sold in weekly open markets	
Economic		
Diversification and safety, circular and solidarity business, cost effectiveness and efficiency, standard circular business establishment, safety and security	Big extensive markets covering over 5ha of land area on average and so making economic scale/viability	44%
	More than one agricultural commodity sold and so diversified	
	Products sold are also bought by local consumers	
	Multiple complimentary business lines of inputs, tools and agricultural commodities though by different individuals	
	Multi-stakeholder involvement consisting of supervisors, suppliers, venders, buyers and consumers	
	And so promotes buying and selling	
	Markets in fixed traceable locations	
	As overall markets had corporate qualities	
AVERAGE AGROECOLOGY BUSINESS STATUS		53%

Secondly, collected data was categorized based on strength, weaknesses, opportunities and threats (SWOT), to give the study more rigour. Results showed that major strong elements were 6, 5 weaknesses, 7 opportunities and 6 threats.

Strengths

1. Big extensive markets land area in the range of 5ha to 10 ha, on avearge
2. Land was allocated by local governments
3. Land allocated out of busy congested and polluted urban settings
4. With management that coordinates general market activities
5. Have a waste management system and toilets
6. Most cereal venders claimed that cereals are produced without spraying (Figure 2)

Figure 3 Small quantities of agricultural products stocked by venders

Weaknesses

1. Low volumes of agricultural products per stall, 5kgs to 50kgs (Figure 3)
2. Products were not labelled in any way
3. In 2 WOMs agricultural products' stalls were observed integrated with non-consumable goods such as toiletries.
4. Vehicles go far into the market for parking or delivery of goods (Figure 4)

5. Power relations caused conflicts of who takes upper responsibility of the market were reported in the case of Arapai and Ocorimodgmin WOMs

Figure 4 Vehicles offloading agricultural produce inside the open weekly market

Opportunities

1. Green environments with trees for shade and grass were observed
2. Stalls lined along pathways either as built shades or as open space (Figure 5)
3. Goods spread out onto tarpaulin or other materials and not put on the ground
4. Empty space still existed for expansion (Figure 5)
5. Each category of commodities such as vegetables and cereals were allocated their own section in all WOMs
6. Venders of other products have technologies that inform what those with agricultural products may adopt, for example use of megaphones to share product information
7. Possibility of traceability given that some farmers directly supply studied markets

Figure 5 Shaded stalls with tomatoes spread on some materials and not on the bare soil, and with trees in the background

Threats

1. Synthetic pesticides and chemicals are sold in the same market space
2. Middle traders bring products to the market for re-sale to venders or supply other full-time markets
3. All 100% interviewed venders admitted that some agricultural products sold were previously sprayed, and that others were not known to have been sprayed
4. Both sprayed and not sprayed products are sold from the same allocated space with no separation
5. Tomato venders believed that when agricultural products are sprayed with pesticides they last longer on the shelf
6. The high population of people visiting the market and causing degradation of the environment which seem to have been conserved (Figure 6)

Figure 6 Empty spaces in the open weekly market with signs of soil exposure to erosion

PERMANENT FULL-TIME MARKETS

Like in the case of weekly open markets, permanent full-time markets were subjected to analysis against AE business social, environmental and economic values as well as for SWOT. It was established that PFTMs were agro-ecological 24% socially, 23% environmentally and 50%

economically, with an average percentage of 32% (Table 2). Their week areas are majorly due to lack of social and environment focus, and with ultimate pursuing income generation per se. Youth venders were absent. Each vender seemed isolated and just waiting for the next opportunity to sell. These market had also less green environment and limited traffic as compared to WOMs.

Table 2 Analysis of Permanent Full-Time Markets (PFTM) against AE business values

AE Values	**Data on PFTM Agro-ecological characteristics/values**	**% AE**
Social		24%
Systems principles; co-creation and sharing of knowledge; Components' synergy and interactions; social-cultural values; traceability; inclusivity	Complementary business groups of different types of inputs	
	Inclusive markets with gender sensitivity (Men, women) and all selling crop commodities; with a management structure and leadership	
	Land was allocated by local governments and so ownership assured	
	With management that coordinates general market activities	
	Participation and co-creation as goods are supplied by middle persons, and then stocked by local venders from whom buy for homeuse.	
Environmental		
Responsible land governance; Biodiversity conservation and synergies; Sanitation maintenance; Human resources welfare and health; Synthetic in puts reduction/elimination	Markets located on land provided by the local authority	23%
	Had a stalls allocation system to prevent conflicts over space	
	Have a waste management system and toilet services	
	Claim of cereals being produced without spraying by Cereal venders (Figure 2)	
	Biodiversity of commodities including indigenous ones are sold in weekly open markets	
Economic		

Diversification and safety, circular and solidarity business, cost effectiveness and efficiency, standard circular business establishment, safety and security	Big built structure with space for agricultural products which is on economic scale and so viable	50%
	More than one agricultural commodity sold and so diversified	
	Products sold are also bought by local consumers	
	Multiple complimentary business lines of inputs, tools and agricultural commodities though by different individuals	
	Multi-stakeholder involvement consisting of supervisors, suppliers, venders, buyers and consumers	
	And so promotes buying and selling	
	Markets in fixed accessible and traceable locations	
	As overall markets had corporate qualities	
	Some products labelled	
AVERAGE AGROECOLOGY BUSINESS STATUS		32%

Regarding the SWOT analysis, PFTM were found to have some strength, weaknesses, opportunities for being agro-ecological as well as limiting threats to the agro-ecological status, as presented below.

Strengths

1. Centrally located by local authorities (Local Government)
2. Well-built and spacious
3. Very accessible

Weaknesses

1. Only open to traders as venders and no farmers bring own products and sell from the WOMs
2. Products are collected from weekly markets with no traceability of the source
3. Sprayed or not sprayed all products are mixed up with simple interest in visual market quality only
4. Though very accessible, do not have as much traffic of visitors/

buyers as weekly open markets

Opportunities

In the case of Popular Knowledge Women Initiative (PKWI), they had own outlet. This gives hope that a full-time market may be opened up by agroecology business operator groups.

Threats

1. No possibility for traceability based on the way these markets operate now
2. Some products have visible synthetic chemicals on them
3. Preservation of cereals is by fumigation with synthetic pesticides
4. Markets are fully occupied
5. No knowledge of agroecology

CAUSES OF IDENTIFIED WEAKNESSES IN OPEN WEEKLY MARKETS

Whereas there are immediate and secondary causes of weaknesses, we felt that by addressing identified primary/root causes, existing weaknesses would be solved. Identified primary/root causes were, (Table 5)

- Degraded soils
- Limited availability and affordability of in puts
- Limited access to agri-inputs
- Poverty in the community
- Lack of warehousing/storage facilities to serve the market
- Lack of associated venders to bulk stock of agricultural products
- Low level of agricultural systems development
- Make shift nature of weekly open markets
- Weak marketing systems for agricultural commodities in these markets
- Cultural effect on roles sharing where men take on most lucrative business and leave low paying ones to women
- Limited set up of these markets as they seem to expand anyhow by responding to demand for extra space

CAUSES OF IDENTIFIED THREATS IN WEEKLY OPEN MARKETS

Like in the case of weaknesses, we take primary/root causes of threats to be major areas for intervention if at all positive development would be expected in the Agroecology business in Eastern Uganda. These identified primary/root causes were, (Table 6)

- Lack of Agroecology knowledge
- Aggressive synthetic chemicals suppliers
- Actors not considering their being part of the full food system
- Inadequate general orientation provided to farmers by extension workers
- Extension workers training curriculum not offering effective alternatives to synthetic chemicals
- Lack of agroecology strategy
- Inadequate sensitization of all actors along the food systems chain about agroecology
- Management of open weekly markets not being cautious of impact of synthetic chemicals on the environment

Table 3 Causes of identified Weaknesses to Agro-ecological alignment of markets in Eastern Uganda

Weakness	Immediate causes	Secondary causes	Primary/ root causes
Low volume of agricultural products per stall	-Limited capital investment by venders -High purchase prices -Low demand for those food items -Limited storage/stocking capacity at home -Desire to sell off so as to avoid transporting goods back home -Limited vending space secured in the market -Low supplied volumes -Creating artificial scarcity to raise market price	-Seasonality of food items supply/ off season period -Markets or stalls being the main road hence need avoid additional transport to access main transport means -Women venders head carrying goods to the market to reduce transport costs -Low production -Low productivity	-Degraded soils -Limited availability and affordability of in puts -Limited access to ag-inputs -Poverty in the community -Lack of warehousing/storage facilities to serve the market -Lack of associated venders to bulk stock
Products not labelled	-No organized production and supply -No quality control systems -No traceability	-Make shift business for short term survival -Lack of appropriate knowledge -No effective demand for such systems by consumers	-Low level of agricultural systems development -Make shift nature of weekly open markets
Agricultural products stalls encroached on by venders of other non-food substances	-Seen as alternative income by venders sub-renting space -Supervisors not being effective -Selling agricultural produce not being lucrative enough	-Areas served being agricultural areas where farmers produce own food -Open weekly markets being more of collection centres for food products	-Weak marketing systems for agricultural products in these markets -Cultural effect on roles sharing where men take on most lucrative

	-Venders of agricultural produce being fewer than for other products	from where bulk purchases are made by traders in permanent urban markets	business and leave low paying ones to women
Vehicles parking inside the market	-Bulkiness of agricultural products delivered -Availability of pathways -Pushy and overriding nature of track drivers in the village community	-Supervisors not being strict -Need to reduce on transport costs to the selling point	-Limited set up of these markets as they seem to expand anyhow by responding to demand for extra space
Power relations conflicts	-Hunger for revenue -Political influence	-Corrupt tendencies	-Selfishness

Table 4 Causes of observed Threats to Agro-ecological alignment of markets in Eastern Uganda

Threats	**Immediate causes**	**Secondary causes**	**Primary/ root causes**
Synthetic chemicals in the open weekly market	-Demanded by farmers -Lack of knowledge about their effects on life and environment	-Extension services deliver and promote use of synthetic chemicals -Packed in small affordable quantities	-Lack of Agroecology knowledge -Aggressive synthetic chemicals suppliers
Middle level suppliers	-Farmers not business oriented -Lack of strong farmer associations	-Extension services that make farmers producers only	-Training offered to actors at all levels -Actors not considering being part of the full food system
Sprayed agricultural produce on the market	-Consumers still demand for them -Lack of knowledge about the effect of synthetic chemicals -Pest and disease problems	-Limited dissemination of agroecology knowledge -Lack of involving all actors in the food system hence seeing food as addressing hunger only and not as a heath solution -Absence of naturally derived safe chemicals in the market	-General orientation provided to farmers by extension workers -Extension workers training curriculum not offering effective alternatives to synthetic chemicals -Lack of agroecology strategy
Sprayed and unsprayed agricultural products mixed up	-Lack of knowledge about the difference between the two -Agroecology farmers not being organized in marketing -Lack of specific market for agro-ecological products	-Consumers not demanding for agro-ecological products -Lack of consumer knowledge of Agroecology -Agroecology not being seen as business oriented	-Lack of the agroecology strategy -Inadequate sensitization of all actors along the food systems chain about agroecology

Extreme belief that sprayed products last longer on shelf	-Lack of knowledge about effects of synthetic chemicals on health -Absence of alternative solutions on market	-Limited extension service for agroecology -Limited research to support agroecology	-Lack of an agroecology strategy
Clouded open weekly markets causing environment degradation	-Inadequate planning of open weekly market -Likely lack of environment impact assessments of open weekly markets	-Over emphasis put on just revenue collection	-Management of open weekly markets not being cautious of impact on the environment

Discussion and Conclusion

Weekly open markets are known to be the easiest way up country consumers access goods for their daily use as was also reported by Corrie and Evans (2022). These markets are under management of the local government who collect revenue from them and so as Mintz (1971) put it that they have an internal system. As such, they allocate what they consider to be the most suitable locations for them. Management is mostly about allocation of space and ensuring law and order in the market on top of collection of market dues which in most of these weekly markets ranged from 2000Ugx to 4000Ugx. This way buyers and sellers (Hodder, 1965) meet in these weekly open markets.

Whereas management of WOMs knew about environment friendly farming without use of pesticides, they did not know agroecology in particular. Their view was that whether sprayed or not these products could be marketed in the same place without any problem. The advised that AE business venders would market their products like other market venders who keep announcing information about their products.

The 50% average of WOMs agro-ecological nature denies the opportunity of them being AE businesses which would be put at 75% and above. This has implications for the need to link CCRP-FRN AE business model actors to markets in the Eastern region. Converting the remaining 50% of WOM's characteristics to acceptable agro-ecologically social, environmental and economic status would be a long term measure.

The SWOT Analysis shows that open weekly markets (WOM) have some strength towards being agroecology markets too. It also shows that existing gaps are those that can be filled in order to create space for

Agroecology products. The biggest threat is that of having no knowledge of Agroecology and the presence of synthetic pesticides in the same place as well as the assumption that application of synthetic pesticides increases product shelf life. However, it is opportune that there is plenty of expansion space and that market supervisors can be contacted for discussion.

In conclusion, WOMs have 50% elements of an AE business. The situation in studied WOMs in Eastern region shows that there is a possibility of Agroecology products entering existing WOMs. Based on this fact we make recommendations on the best way forward.

This is the first study of Weekly Open Markets potential to serve as Agroecology business markets. The road map to bringing CCRP-FRN AE business models into existing Weekly Open Markets is a new development co-created by this study. AFSA (2022) book "Shaping the future of food markets in Africa: What kind of markets do we need for transition to Agroecology? did not provide such a road map.

RECOMMENDATIONS

Based on results and discussions above, and taking advantage of the Strength and Opportunities identified in weekly open markets, the following recommendations are made to inform the best way forward towards linking CCRP-FRN AE business models to markets in the Eastern region. That is,

- Organize actors in agroecology business models/CCRP-FRN projects in the region to produce and form AE business marketing teams
- Identify AE business models nearest to these markets who would take advantage of vending agro-ecology products
- Contact the supervisor (Mr Moses Peter Abau, Tel. 0782713642) of the cereals and vegetables sections in studied open weekly markets to explore possibilities for allocation of space to identified AE business models' agroecology products' venders
- AE business actors should go for a single space in every open weekly market, and have it clearly labelled and stocked with

agroecology products

- For value added products, get them marketed with agroecology agreed tags/labels as first and second party/pseudo-PGS endorsed products for traceability
- An open weekly market supply of agroecology products' procedure would also have to be developed and agreed upon by all co-creating AE business model actors. This may have to be aligned to already developed business assessment tools for consistence.

Further analysis to determine underlying causes revealed that observed weaknesses and threats were symptoms of deeper rooted causes. In order for AE business model market linkages to succeed, deep rooted causes of weaknesses and threats have to be addressed. Consequently, we recommend that,

► Extension services encourage and train farmers to prevent soils degradation and use affordable soil fertility management methods
► Lobby and advocate for environment friendly in puts being given to agroecology farmers in the Soroti region as has been done in some parts of Eastern Uganda by the Ministry of Agriculture Animal Industry and Fisheries (MAAIF)
► Mechanisms be identified to mitigate Poverty through agroecology
► Appropriate storage facilities be developed in areas of weekly open markets to ease handling of big volumes and also ensure quality
► Vender associations be formed to bulk buying and transporting as well as storage of agricultural products
► The agroecosystem be well understood and designed in a multi-sectoral way with synergies among businesses
► Given that weekly open markets are regular and have internal systems, focus on best market practices be maintained beyond collection of revenue, with specific interest in agricultural commodities marketing systems
► Even though Culture effects role sharing by having mostly female venders for agricultural practices, let women use this as an advantage and be helped to handle agroecology business perfectly well.
► The poor organization of weekly open markets should currently be an advantage to agroecology business. In permanent markets, it was apparent that space was not available any more. So, it is timely for agroecology

business to penetrate weekly open markets.
► The CCPRN-FRN project should speed up sharing of Agroecology knowledge amongst farmers. Weekly open markets could be good points for sensitizing farmers, venders and consumers at the sametime.
► The best way to address supply of synthetic chemicals in weekly open markets, is to attract sources of alternative naturally derived products to the market, such as Vermipro, and sensitizing all actors about the negative impact of synthetic chemicals on life and the environment
► A systems wide approach has to be brought to the knowledge of agroecology business actors as members of the food system, and not working in isolation
► Agroecology business sensitization should be inclusive and participatory to involve extension workers as much as possible
► Agricultural colleges must be sensitized to cause change of curriculum away from offering teaching only about synthetic chemicals to teaching alternative environment friendly crop and animals management options
► The agroecology strategy process must be completed as soon as possible and shared among agroecology business farmers in Eastern Uganda
► Management of open weekly markets not being cautious of impact of synthetic chemicals on the environment

With above recommendations implemented, it is expected that AE business shall finally and visibly be accommodated in weekly open markets. The alternative to this shall be AE business actors starting their own Agroecology markets like the case at Abaita Ababbiri or the Popular Women's Knowledge Initiative (PWKI) outlet in Bukedea Town Council. We present a summary of the recommended pathway in the Road Map illustrated in Figure 7 below.

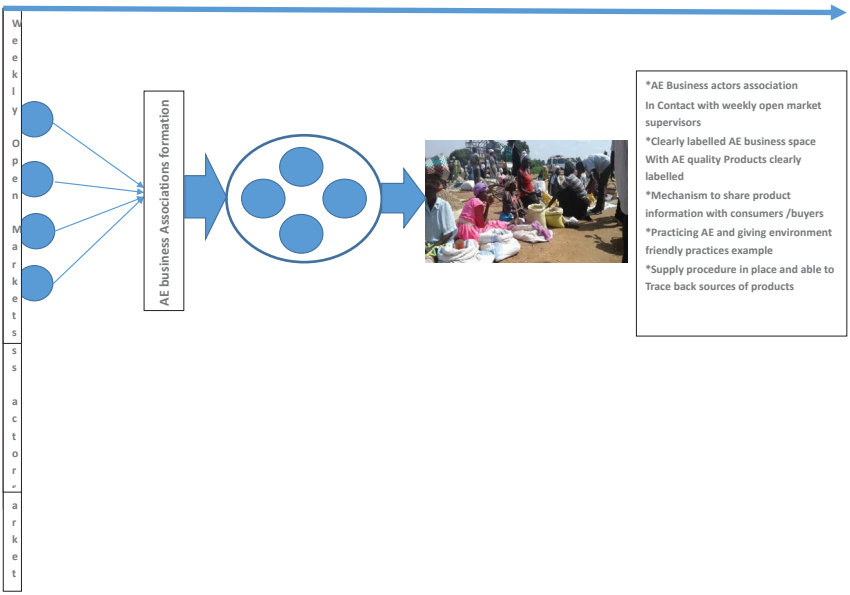

Figure 7 Road Map to AE business in Weekly Open Markets

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