



TANSHEP



SHEP Introduction and Good Practices

(1st Version)

October 2022

*Anzia Sokoni Maliza Shambani
Kwa Kipato Zaidi*



Table of Contents



Introduction of SHEP	1
SHEP Implementation in Tanzania	2
Modality of Implementation	3
Some Successful Stories created by Farmers..	11
Initiatives for SHEP Upscaling	17
Achievements in Numbers	19
Lessons learnt	19

Introduction of SHEP

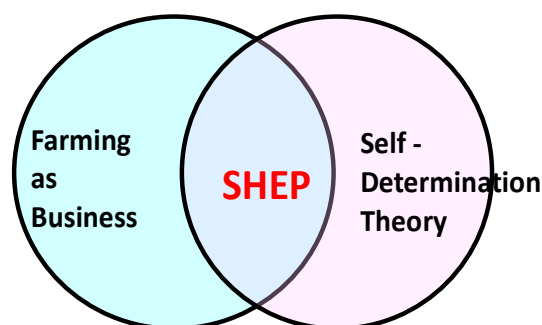
SHEP stands for **S**mallholder **H**orticulture **E**mpowerment & **P**romotion.

It is the extension approach innovated by Japan International Cooperation Agency (JICA) in Kenya and now being implemented in 23 countries in Africa.

It starts with **Market Survey (MS) by farmers**. Based on MS, they determine which crop to produce and how/ when to produce, thus transforming their farming from “Grow and sell” to “Grow to sell”.

As such, SHEP consists of two elements:

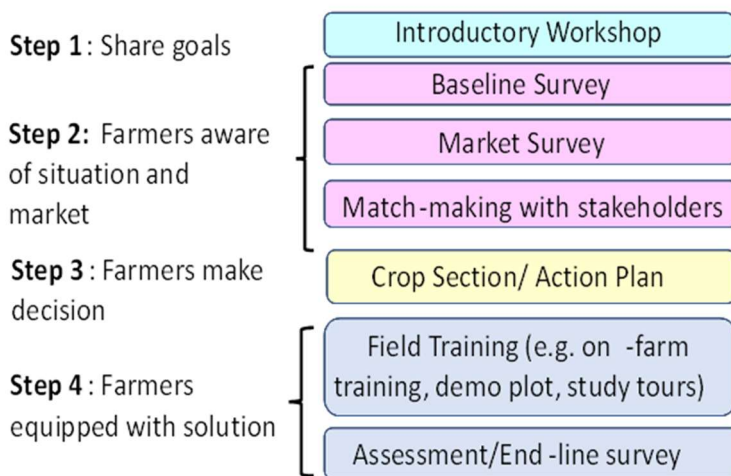
- 1) Farming as business (starting from Market), and
- 2) Self determination (encouraging farmer’s own decisions).



SHEP has four steps for implementation, each of which includes more specific activities, as shown in the figure at the right side.

The SHEP approach is implemented in Tanzanian context through Tanzanian SHEP Project (TANSHEP), which is managed by Ministry of Agriculture and

President’s Office - Regional Administration and Local Government (PO-RALG) under technical assistance of JICA mainly in 12 LGAs in the norther three regions, i.e., Kilimanjaro, Tanga and Arusha.



Major target LGAs of TANSHEP

Region	Kilimanjaro	Tanga	Arusha
1st batch (FY19/20-FY20/21)	Moshi DC	Lushoto DC	Meru DC
	Hai DC	Bumbuli DC	Karatu DC
2nd batch (FY21/22-FY22/23)	Mwanga DC	Korogwe DC	Arusha DC
	Siha DC	Muheza DC	Ngorongoro DC

SHEP Implementation in Tanzania

TANSHEP implements a cycle of SHEP activities along with the fiscal year of Tanzania.



Note:* Match-making can be done at any time, even after action plan.

Modality of Implementation

Step 1: Share goals

TANSHEP promotes SHEP approach with the slogan of

"Anzia Sokoni Malizia Shambani Kwa Kipato Zaidi"

(Start from looking at market needs and grow crops based on them for better income)

The first step is to hold **Introductory Workshop**, where the concept and steps of SHEP are discussed and the slogan of TANSHEP introduced as the goal of applying the SHEP approach. In case of project intervention, the scope of its support should also be explained to stakeholders: the SHEP approach in principle has no element of monetary support and infrastructure development (See Section 4.2.1. in TANSHEP Guidelines for details).

This activity can be conducted at different levels for different stakeholders: for example, at national or regional level targeting LGA officials; at LGA or village level targeting farmers and extension officers.



Joint Introductory Workshop for 3 regions (Arusha, Tanga, and Kilimanjaro) conducted by TANSHEP where the request for proposal was also made for potential LGAs in addition to introduction of SHEP approach with the slogan.

Introductory workshop at village level conducted by Morogoro DC and Ministry of Agriculture (MoA), where SHEP experience of other LGAs was shared by MoA officials, using a video clip of interview with successful farmers.



Step 2: Farmers aware of situation

At this step, three activities are conducted: 1) Baseline Survey (or Farm Income Recording), 2) Market Survey, 3) Match-making.

2.1 Baseline Survey (or Farm Income Recording)

Baseline survey is where farmers become aware of the issues of current farming practice. They compare the cost and sales of last year's production and find if they gained profit or loss. This exercise lets farmers ask themselves whether the current farming is profitable or meeting market needs (harvest timing, quality and quantity) (See Section 4.2.2 in TANSHEP Guidelines for details).

[Help each other !]

The farmers of Umoja A group in Lushoto DC help each other keep the records of production cost and sales, especially for the illiterate members in the regular meetings.



Identification of Weight Conversion Factors

In Tanzania, various weight measurement methods are used for horticultural marketing. In order to compare productivity or unit price, there is a need to convert different units into the standard one by identifying conversion factors.

Table: Conversion Factor identified by Bumbuli DC

Crop (Mazao)	1 Box/1 Kreti	1 Gunia	1 Kiroba	1 Debe/ 1 Ndo	1 Piece/ 1 Kichwa	1 Tenga
Hoho (Sweet pepper)		70~100	80 *	8 **		
Kabichi (Cabbage)		400	400		2	
Karoti (Carrot)			68			
Kitunguu (Onion)				20		
Ngogwe (African Eggplant)			96	16		
Nyanya (Tomato)	40			16		40
Tango (Cucumber)			150	120		
Viazi mwaringo (Irish Potato)		80	96	16 *		
Vitunguu (Garlic)		102	108	18		

Step 2: Farmers aware of situation

2.2 Market Survey

SHEP Market Survey has the following features.

Farmer's Initiatives: It is a farmer who conducts the market survey, neither government officers nor development assistant agencies.

Before production: Upon realization of market requirements, farmers can make a strategic production plan including selection of crops/varieties, harvest timings etc., to get higher profit.

Continues as a routine: Regular communication with buyers or an additional market survey, even after planting, could help farmers to capture changes in market demands as well as better markets.

For market survey, extension officers should assist farmers in selecting a target market which they can visit physically on a regular basis, making appointment with a market manager, and request him/her to introduce buyers to them. Facilitation of discussion with buyers is another role of extension officers when farmers carry out the survey (See Section 4.2.3 in TANSHEP Guidelines for details).



Which month does the price of onions get high or low?

Please tell me about the quality of butternuts you want.

What kinds of vegetables does your hotel need?



Good practices in Market Survey

In TANSHEP, there are many farmers' groups which assign some members as the marketing committee, conducting the market survey on behalf of others (e.g., Vukani group in Arusha DC and Kiwamboki group in Mwangi DC). Often, they are supported by the group in transportation and making contacts to buyers.

Some other groups have their own systems and efforts to conduct the market survey in a more effective and comprehensive way.

- Tujikomboe group in Korogwe DC sets a code of conduct that makes each member, whenever going to the market for their individual purposes, collect price information and share with others.
- Maisha Bora group in Bumbuli DC makes the best use of their family network to obtain price trends from different markets in Tanga and Dar es Salaam, so that they can select the best one for sale.
- Neema Environment Care group in Hai DC applied the techniques for development of contract farming. They physically visited potential companies (not markets!) to find a good partner/ buyer of snow peas and discuss conditions of contract farming.



When is the peak demand season?

How much is the price per crate of tomato in the peak demand season ?

When is the lowest price season?

Should we bring produce to the market here or do you come to our farm?



Step 2: Farmers aware of situation

2.3 Match-making

Match-making is creating a chance where farmers become aware of the stakeholders who can support their farming. They could be buyers, input dealers, financial institutions or DPs. TANSHEP facilitated different types of match-making depending on its purpose: regional seminar, LGA-level meeting or individual matching between stakeholders and famers. This can be done anytime, but usually before or after Step3: action plan (See Section 4.2.4 in TANSHEP Guidelines for details).



**Match-making forum
organized by Kilimanjaro RAS**



**Individual match-making
(Visit to financial institution)
conducted by Lushoto DC**



Demo plot with a private company

Uchira group in Moshi DC established demonstration plots in collaboration with Rijk Zwaan after match-making
(Source: Rijk Zwaan facebook)

Match-making beyond horticulture sub-sector

Bumbuli DC conducted match-making with financial institutions, while supporting farmers' applications for loan. As a result, Umoja and Maisha Bora groups acquired loans for inputs, weeding and harvesting for tea production.

Step 3: Farmers make decisions

Action plan/ Crop selection

Based on the results of market survey and match-making if conducted beforehand, farmers make decisions on what to grow and at what timing. This decision making can be done with formulation of an action plan, which contains 1) profitability analysis and 2) cropping calendar. If farmers are required to select or prioritize a crop, they can examine these elements of the action plan with due consideration to technical feasibilities. Extension officers are responsible for technical facilitation for farmers to formulate an action planning based on realistic data on costing and sale (See Section 4.2.5 in TANSHEP Guidelines for details).

MUHCHA	KIASI CHA GHARAMA	KIWANGI	JUMLA YA GHARAMA	MHUSIKA GHARAMA
Maanalizi ya shamba	30,000	1	30,000	MKULIMA
Mauzo wa mbeji	5,000	1	5,000	MKULIMA
Mbolea ya kawacha (samed)	15,000	1	15,000	MKULIMA
Kupanda Kusaa, kupanda	25,000	1	25,000	MKULIMA
Kupalula	20,000	6	120,000	MKULIMA
Kumwagilia	5,000	48	240,000	MKULIMA
Mbolea ya kutiza na wotezi	17,000	20	340,000	TANSHEP/MK
Madawa ya wadudu na upotezi	4,000	2	8,000	TANSHEP/MK
KUVUNA	5,000	20	100,000	MKULIMA
Vifungashio	1,000	1	1,000	MKULIMA
Uzazi (New/old)	3,000	20	60,000	MKULIMA
Kukodi shamba	60,000	1	60,000	MKULIMA
			1,004,000	
1) GHARAMA ZA UZALISHAJI			1,004,000	
2) KIASI LENGWA CHA MAUZO	6,000	500/mauza	3,000,000	
3) FAIDA = (2-1)			1,996,000	

Profitability analysis

KW: Mwanani Kajiji Inyanga Kabla Sina Wilaya Hanau	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JAN	FEBRUARY	
Mikakati: Tumabadilisha <input type="checkbox"/> Zao/trim <input type="checkbox"/> Ubona <input type="checkbox"/> Kiisi							
<input checked="" type="checkbox"/> Muda wa Mauwa (⇒) <input type="checkbox"/> Kikunuzi <input type="checkbox"/> Mlingirizo							
NYANYA	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila
SHUGHALI ZA KIKUNDI	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila
MIPANDA WA ENSHAPA NA MASHAKI	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila	- Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila - Kuandaa kila

Cropping calendar

Crop diversification in Karatu DC

Karatu DC has a large onion production area. Historically most of the farmers there had not considered growing other vegetables. With TANSHEP support, however, they opted for other crops such as sweet pepper, tomato and watermelon. This selection was based on the market survey, where farmers found that other vegetables also had market needs.



Step 4: Farmers equipped with solutions

At this step, various kinds of technical training could be provided. TANSHEP has conducted 1) Extension Officer (EO) training, 2) Action Plan (AP) field monitoring, 3) field technical training by District Facilitation Team (DFT) or Input Suppliers, and 4) Inter-Farmers' Groups (FG) Study tours.

Extension Officer (EO) Training

EO is a key actor in the SHEP approach. Their function is critically important when farmers change their production patterns according to market needs. With this in mind, TANSHEP organized EO training where excerpts of HORTI-Tengeru trained EO on pest & disease management of horticultural crops. This training was a lecture type, which was followed by field monitoring as On-the-job training (OJT) (See the below).



Action Plan (AP) field monitoring

In TANSHEP, RAS officers and HORTI-Tengeru experts regularly visited fields to monitor the progress of farmers' action plan, including i) the observance of cropping calendar, ii) pest & disease management, iii) continuation of market survey or communication with target buyers, iv) status of record keeping, and v) any other issues such as training or match-making with stakeholders.



Impacts of AP field monitoring on the ground

Eden group in Meru DC appreciated technical advice by HORTI-Tengeru when faced the problem of locust damage on African Eggplant. They followed the advice, killing and grinding locusts and then then mix it with water; filtering and spraying it to the plants; and all live locust has run away. Meru DFT, who observed this intervention, asserted that it was like a miracle although based on a real science.

Field training by DFT and/or Input suppliers

Field technical training was provided to farmers along with the action plan, e.g., on nursery establishment, land preparation, ridge making, and planting. Trainers are DFT and/or input suppliers, from which inputs were procured. Such companies especially large-scale international companies, have their own technical officers to dispatch to fields, at free of charge, as part of follow-up services.

Technical training provided by Fertilizer Company (Yara International Ltd) for ULT group in Lushoto DC.



Inter-Farmers' Group (FG) Study Tour

TANSHEP also adopted farmer-to-farmer extension approach to share technical knowledge among farmers. DFT selects one or two groups as model host groups, which receive the visit by other groups in the same district to exchange experience. Farmer-to-farmer (F-to-F) extension is also done by other modalities such as meeting and workshops.



Good practices in F-to-F extension

Under coordination of Lushoto DFT, Uvivibo group shared the information on market potentials of snow peas with Nazareth group. The latter group followed the practice done by the former group. Now both groups are enjoying the snow pea production.

In Moshi DC, Uchira group visited Mbogamboga group and learned how to grow butternuts and contact of possible buyers. After the communication with the buyer, a farmer of Uchira produced butternuts at the requested time and sold with sizeable profit.

Some Successful Stories created by Farmers

Nguvukazi Group in Moshi DC (F:23, M:17) after getting training on Market Survey from TANSHEP, continues it with their own initiatives, at various makers, which helped them to obtain new buyers and identify new potential crops such as color peppers. The group, after Match-making, created business linkages with different institutions, e.g., NMB for loan and Seed. Co. for establishing demo plots. They gained Tsh 9.5 million from their trial production, thus creating group capital while making individuals renovate a house, pay school fees and start new business. Recently they received 4-4-2 loan from the DC and established a green houses with drip irrigation system, so as to cope with the impacts of climate changes .

👉 They have the marketing committee, which consists of five members conducting the Market Survey on behalf of others.

👉 They are pro-active in communication with stakeholders, not waiting for the stakeholders to come.

👉 They demonstrate the synergy impact of SHEP and 4-4-2 loan as the former enlightened them on market needs while the latter developed infrastructure to change their production patterns.

Before

- Crops produced: Tomato, Black Night Shade, Giant Mustard, Amaranths and Chinese
- Season: August- February (low price season)
- Buyers: Mbuyuni and Himo markets
- Open-field cultivation with irrigation

After

- Crops produced: Color peppers and Cabbage newly added
- Season: March – June (high price seasons)
- Buyers: DSM and Kenya newly added
- Green houses and drip irrigation system newly added



Mshikamano Group in Hai DC (F:15, M:13) recorded a total profit of Tsh 3.7 million out of cabbage and sweet pepper productions. As originally well-organized group, they used Tsh 0.9 million for continuing group farming. The key to success is constant updating of market information. In addition, all members are assigned to attend the group farm in rotation. The profit of group farming is divided among the members based on the workload of individual members. Using the profit, some members tried new vegetables as individual projects. As a group, they plan to increase the group farm from 1 acre to 3 acres.

👍 Solidarity in the group enabled farmers to properly operate group farm with proper market information.

- Before*
 - The group was well-organized but followed what and when other farmers grow by habit.
 - Did not have a chance to put their plans into practice.
- After*
 - With introduction of SHEP approach, they take full advantage of their solidarity as a group.
 - First success led to member's motivation for implementing individual and group plans.



This farmer started cucumber cultivation with the profit from group farming. First, he got connection with a buyer from Dar es Salaam at the local market in a market survey. Following market needs, he sold 20 bags of cucumber and earned a profit of Tsh 1.2 million. He is now reinvesting some of it to continue cucumber farming while sending children to school with the rest.

Nazareth Group in Lushoto DC (F:23, M:7) had suffered from low production of potato damaged by Bacterial Wilt. Nevertheless, a small quantity that they had sold during the peak demand season received high price. They then continued gathering information on potato and identify a new variety through DFT, which showed resistance against Bacterial Wilt. Currently they are enjoying seed-potato production of the new variety, which is highly demanded by other farmers in the district. The group has also started snow pea production after knowing its market potentiality from another group. The members are now able to renovate houses and pay education fee (e.g., for the university).

👉 Searching market-related information from everywhere, not only from buyers at market but also from DFT and other farmers.

Before

- Use of the conventional variety of Irish potato (OBAMA)
- Low production due to Bacterial Wilt

After

- Use of the new variety (UNICA)
- High production and sell seed-potato to other farmers
- Produce snow peas and sell to exporters

Snow pea introduced by F-to-F extension →



↑
Irish Potato (UNICA) farm
(New variety alternative to OBAMA)

Constructing a new house building (behind the group members) ↓



Maisha Bora Group in Bumbuli DC (F:5, M:17) gained the profit of Tsh 4.4 million from tomato cultivation in one acre, which helped them to enlarge their horticultural production, procure motorbikes, or starting new business, e.g., kiosk.

👉 They are doing Market Survey thoroughly, using family network to collect price information from different markets in Tanga and Dar-es Salaam before and during cultivation.

- Before**
 - Procure inputs individually
 - Cultivate in the "easy" season (e.g., tomato from May to August).
 - Sell locally at farm gate
 - No record kept
- After**
 - Group procurement from a reliable supplier (after Match-making)
 - Cultivate for the peak demand season (e.g., tomato from Jan. to Apr.)
 - Send the produce by bus to markets after price comparison
 - Records on kept for production cost and sales



MULINDO WA UCHAMBAZI WA FAIDA
 Jina la Zao: NYANYA
 Ukubwa wa Eneo: 1 Ekari
 Uuzaji Ulimalizika lini (Mwzi/Mwaka) JUN /2021

No	Shuduli / Gharama	Gharama (Jenari)	Gharama (Halisi)	Muhesha wa Gharama
1	Maandalizi ya Shamba	60,000	70,000	MKULIMA
2	Uharumi wa mbegu	580,000	245,900	TAFSHEP
3	Mbolea ya kupanda m'gharama za asidi/nyaji kitulu	60,000	40,000	MKULIMA
4	Ku-palilia	160,000	15,000	MKULIMA
5	Ki-awajilia	160,000	15,000	MKULIMA
6	Mbolea ya kiozazi m'gharama za unekaji	30,000	75,000	TAFSHEP
7	Gharama za ufua wa kuuena	9000		MKULIMA
8	Gharama za kuuena	60,000		MKULIMA
9	Gharama za ufunguzaji	130,000		
10	Uka-firichaji	1,170,000		
11	Mazeo (ushuri n.k)	65,000		
12	Ku-afisa shamba		40,000	
13	Mwanjuzi	72,000	60,000	
14	Machini ya Wachuli + Magonjwa	200,000	375,330	
15	Kupanda		40,000	
16				
17				
A	Jumla ya Gharama za Uchambazi	2,816,000	1,025,330	
1	Pasi ya Muzo (Gharama)	15000	16,000	
2	Kiasi cha Muzo (Gharama) PDDO	322	342	
B	Jumla ya Muzo (Gharama) (D x B)	5,832,000	5,472,000	
∴	FAIDA (B - A)	3,016,000	4,446,670	



Motorbike procured with profits of SHEP farming

Ushauri Group in Meru DC (F:11, M:10), after the introduction of market survey, actively sought markets even beyond TANSHEP support. Initially, they recorded Tsh 1.5 million sales for butternut group demo plot. With a sense of achievement, the farmers moved on to try other crops. With a buyer introduced by TAHA and Meru DC, the farmers grew habanero and earned input loan from a bank based on the purchase agreement. Currently, they are growing eggplants and started selling to wholesalers at the regional market.

👉 Creating good cycle of reinvestment in production through ever seeking markets and cooperation with stakeholders

Before

- Limited knowledge of markets and their stakeholders.
- A group rather loosely connected by farmers.
- Hesitant to try new vegetables.

After

- Actively seeking markets and stakeholders' support.
- Hybrid practice of group and individual farming with more information and cooperation with stakeholders.
- Willingness to try new vegetables.



Uwezo Maleckchand (F:7, M:5) is a unique farmers group in **Karatu DC**. While situated in a large onion production, they were willing to try other vegetables for diversifying their products, using SHEP approach. Even though they failed to grow green pepper in the first trial for its novelty, they kept their initial belief on the result of market survey at local markets, showing that the crop would be profitable. With their own fund, they tried production again, which resulted in attaining a profit of Tsh 760,000 from one acre. A key for their resilience is the cohesion as a group. The group is also amongst others starting watermelon cultivation, and other farmers follow suit because of its profitability with less input cost. Karatu DC actually promoted watermelon production by providing inputs and training to the farmers' groups.

👉 Resilience to failure and strong belief in local needs based on market survey.

Before

- Solely producing onion and selling to foreign buyers.
- Willing to try other vegetables but no experience.
- Intended for group production.

After

- Confirmed their belief in market survey result at local markets.
- Succeeded in diversifying their source of income.
- Further strengthen group farming capacity.
- Exemplifying the move of seeking alternative source of income in Karatu DC.



Initiatives for SHEP upscaling

Within the LGA

The LGAs are upscaling the SHEP approach to other farmers' groups beyond TANSHEP targets. Such efforts have been made by Meru DC for 10 groups, Moshi DC for 4 groups, Karatu DC for 3 groups, Bumbuli DC for 3 groups, and Mwanga DC for 7 groups.

The support from the LGA is not necessarily for full application of the SHEP approach from Step 1 to Step 4. Rather it could focus on key step/activities according to the needs of target farmers. For example, Mwanga DC supported only Market Survey after sharing the SHEP concepts and steps through extension officers as part of their regular services.

LGA-to-LGA upscaling

Under coordination of Kilimanjaro RAS and TANSHEP, Moshi MC leaned the implementation of SHEP approach from Moshi DC and Mwanga DC. Likewise, under the coordination of Tanga RAS and TANSHEP, Tanga CC has started implement of SHEP approach with its potential group.

Moshi DC has own initiatives for upscaling. The DFT was invited by FTK (Foundation for community Transmission – Kilimanjaro) to train farmers in Simanjiro DC on Market Survey.



SHEP Training by Moshi DFT for farmers in Simanjiro DC

In the academic circle

TANSHEP provided SHEP training to Sokoine University lectures and alumni members under the support of Sasakawa Africa Association.



(Source of Photo: <https://www.sua.ac.tz/news/training-smallholder-horticulture-empowerment-and-promotion-shep-approach-sokoine-university>)

With other initiatives

Division of Crop Development in MoA together with some representatives of the TANSHEP target LGAs provided SHEP training to 26 officers in 13 LGAs under EU-Agri-connect programs.

HORTI-Tengeru introduced the SHEP concept and approach in training programs of KIBOWAVI Project in Katavi and Songwe Regions, targeting 30 extension officers and 70 lead farmers. Later of this, the SHEP approach was incorporated in their horticulture production manual.



SHEP Training Session under EU Agri-connect

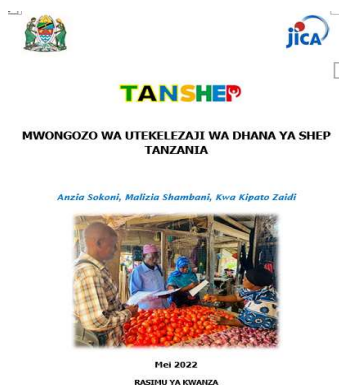
For extension officers and MATIs

SHEP was incorporated in MATI Curricula. TANSHEP in collaboration with MATI representatives developed Compendium for Horticulture Marketing Module.

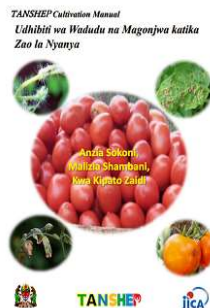
TANSHEP provided technical inputs to DTER of MoA in the revision of National Extension Guidelines which are to be finalized soon.

Materials for Upscaling

TANSHEP Guideline together with some technical manuals and PR flyers have been developed.



TANSHEP Guidelines



Pest and Disease Management Book (Tomato)



PR Calendar

Achievements in Numbers

- More than 3000 farmers are involved in TANSHEP and are engaged in farming as business using the SHEP approach.
- Records kept by the sample farmers (208 farmers) showed a 45% increase of average income through vegetable production per household over 2 years from FY2019/20 to FY 2020/21 compared to the baseline data of FY2018/19, despite the negative impact of COVID-19 pandemic.
- 72 district officers and 157 extension officers were or are now trained by TANSHEP on the SHEP approach. Among them, 33 district officers were certified as Basic-level SHEP competence holders by the examination for capacity assessment, which is still on-going for other officers, including extension officers.
- More than 80 private actors (e.g., seed companies, input suppliers, financial institutions, and buyers) have been involved in TANSHEP: they have business with the TANSHEP farmers through contract farming, establishment of demo plots, and provision of financial loan.

Lessons learnt

Market Survey (MS)

MS can help farmers not only identify the price trend but also create business links with potential buyers, thus assuring the market before cultivation.

Farmers require only initial support as a kick-off (e.g., introducing to market managers or buyers and training on how to conduct the survey). Once they become familiar with the modality, they are happy to continue it by themselves. Therefore, the project can/should support only first time of the survey as a pilot.

There is often a challenge that a buyer can be not trustful or fails to read the future market trend. Therefore, farmers are encouraged to have more than one buyer as alternative outlets.

MS should be done even after planting. Regular communication with buyers helps farmers to know changes in market demands, and additional MS helps to find another buyer.

Match-making (MM)

MM forum can be organized at different levels of institutions, i.e., at central, regional, and district levels. In principle, the larger the size of the forum is, the easier it becomes to attract stakeholders including private actors, but more difficult to make a follow-up after the forum.

MM forum is only a starting point of discussion and agreement for business collaboration. Proactive follow-up from farmers' side is rather crucial to materialize collaboration while farmers tend to wait for stakeholders to come.

MM between farmers and farmers or Farmer-to-Farmer extension, including Inter FG Study Tour is considerably effective to disseminate good practices and share market information.

Other lessons learnt

As regards Baseline Survey or Farm Income Recording, there may be a challenge to make farmers record proper data at least at the initial stage of record keeping. There is a need to check their data over whether their data are realistic or not e.g., on production cost, unit yield, and selling price.

As part of Action Plan, it is important to estimate the profit through profitability analysis before production. This profitability analysis should be reviewed based on the actual figures of production and sales, so that farmers come to recognize weakness and challenges in their estimation or actual production.

Following the results of MS, many farmers try improvements in production e.g., on timing of planting and change of the variety. Hence, technical training for cultivation and field monitoring should be undertaken by extension officers or field officers.

LGAs are strongly suggested to combine the 4-4-2 loan scheme with SHEP approach. The loan helps farmers equip with necessary infrastructures and materials to improve production patterns according to market needs, e.g., with the establishment of a green house and procurement of water pumps.

SHEP is one of the extension approaches. It should/ could be practiced as part of the regular extension services rather than by project intervention for a limited number of farmers.

*TANSHEP promotes the SHEP approach
with the slogan of*

***"Anzia Sokoni Malizia Shambani
Kwa Kipato Zaidi"***

*(Start from looking at market needs and grow crops
based on them for better income)*