

# Pathways for Africa



**IN THIS SECTION**, we present the transcribed results of the breakout groups for each STEP. The participants have developed four different pathways: The *Ubuntu* pathway (by the West Africa group), the *Prosperous and Peaceful East Africa* pathway, the *Urugendo* pathway (of the Southern Africa group) and the *Rainbow* pathway (of the African Continent group). Each group chose its own pathway name.

For each pathway, the 3 Horizons diagrams resulting from STEP 1 (desired future) and STEP 2 (present concerns and their deep causes) were transformed into tables to facilitate visualization and comparison across groups. For STEP 3, we present the 3 Horizons diagrams transcribed into digital form and some pictures of the original diagrams. Based on the 3 Horizons diagrams, the participants synthesized their discussions in multiple creative forms. The method provided structure for the group discussions enabling inter-

comparison, but also fostered creativity in relation to the synthesis phase of each stage. The groups chose to express the core ideas in their pathways as letters to dear relatives, diagrams, hashtags, newspaper headlines, drawings, as well as simple texts and tables.

**All the words in this section belong to the participants** (we edited typos, clarified some words and organised the material). All the participants received and were invited to review the content of these sections before publication of the final report. We received 3 detailed revisions. We, the facilitators and researchers writing this report, do not present any analysis of the results in this section. After presenting all the pathways, the next section titled Discussion about convergences and divergences, presents our analysis about the pathways' core features, underlying narratives, commonalities and differences.

## The Ubuntu pathway (Western and Central Africa group)

### STEP 1 results – The desired future for agriculture in 2050+

Table 3 presents the transcription of the STEP 1 in the 3 Horizons diagram for the Ubuntu pathway. In red, with \*, we mark the only point of divergence between the participants regarding the desired future during the exercise:

if Genetic Modified Crops (GMOs) have a role in the future or if the future is organic and free from GMOs. The participants decided to synthesize their desired future as a mail conversation between “Christelle” living in the future and “Granny” living in the present (Box 3). The name Ubuntu references to the land where Christelle lives and refers to an originally Nguni word referring to the quality of human inter-dependence and connectivity.

**Table 3: STEP1 – Ubuntu pathway:** the desired future and pockets of this future in the present (transcription of the 3 Horizons diagram)<sup>17</sup>

Society	Economy	Environment	Governance
People feel safe in Africa. Good quality of food (Why/no GMO*). Multipolar autonomous societies. Africa embraces its diversity and enhance it rather than look outward always. Dynamic farmers’ association & cooperatives. Creation of hubs to show the promising technologies. Access to land for everyone (women). Gender equal agriculture. Rebranding our education institutions on agriculture practice. Agriculture is embraced by young people as a good viable business pathway. Agriculture is a must – study in primary & secondary education. <b>Seeds of this future in the present:</b> Capacity building of the new generation of agronomist. Farmers associations.	Affordable indigenous food crops are accessible to all. Easily accessible markets. Economy at service of society (not other way around). Subsistence agriculture will completely transform. Creating intra-African markets. <b>Seeds of this future in the present:</b> Mutual risk sharing through empowering farmers’ association.	Agroecology fully understood and embraced. Adaptation efforts will take shape and vulnerability reduced. Prepared to climate change hazards. Energy for food production is clean and less (zero) CO2 emissions. A farming system free from poisonous pesticide use. Creating balance in use of organic and inorganic inputs. <b>Seeds of this future in the present:</b> A farming system fully organic. Organic agriculture. Minimal chemical inputs. Sustainable farming: natural fertilizers and pesticides.	Access to logistic facilities. Community involvement in policy. Funding is made available with little or no interest subsistence farmers. Enough budget to support agriculture initiatives. Democratic constitutions and culture will take root. Self-help collaborations will have role. Good legal framework.

### Box 3: STEP1 – Ubuntu pathway: the synthesis story in the form of a letter describing the desired future

Dear Granny,

How are you? How are the neighbours?

I bring you greetings from Ubuntu land where I have a farm alongside community friends. We grow several kinds of indigenous food crops and some support crops from outside of Africa. These crops serve food to us, our community, our animals and we also export some of the products to other parts of Africa and the world. We have formed several strong and active cooperative societies who advocate for our good as farmers in Ubuntu land.

The government have been very supportive to us as a cooperative, providing the necessary legal frameworks. Today, I own several hectares of land alongside my brothers and sisters, which you told me in your stories that you never had access to as a woman, but today I have! Thanks granny!

The government has provided 1% interest loans to our cooperatives to aid research, innovation and investments in our businesses. We are also supported by their extension services. Recently, in addition to the existing academic work in our schools on agriculture, our communities have set up a modern agricultural hub, where our young people are given room for research and practical approach towards agriculture.

The agroecology of Ubuntu land and its people has been fully understood, and our yields have been tremendous and really profitable to us. I'm also happy to tell you that our goods no longer go bad on our farm as our roads are good, the train systems work and helping our products arrive at our desired clients on time. Both we and our clients have easy access to the products and the market information through good internet connections.

We have found a way to adapt to the climate change, that sadly was caused by your generation... lol the excess runoffs from long periods of rainfall have been stored in underground reservoirs and irrigation systems for use during the dry seasons. We no longer depend on the rains alone to grow our seeds, we have also found a way to balance the use of inorganic and organic manures for the good of the crops and lands.

The government and the community have ensured that technology is embraced with the necessary safety precautions for the great good of Ubuntu, Africa and our world today.

The younger ones now feel it is cool to be a farmer so they are fully on board with agriculture as business.

Hope you are doing well!

Xoxo

Christelle

**STEP 2 results – Current challenges in agriculture and their deep causes**

Table 4 presents the transcription of the 3 Horizons diagram for STEP 2 for the Ubuntu pathway. There were no divergences regarding the present concerns between the participants. Table 5 synthesizes the discussion about the

root causes of their concerns. To synthesize the results of this step, the participants chose two forms of creative writings: they wrote a series of hashtags about their present concerns (Box 4), and a letter from Granny (Box 5) as a reply to the initial letter from Christelle (Box 3).

**Table 4: STEP2 – Ubuntu pathway:** Present concerns (transcription of the 3 Horizons diagram)<sup>18</sup>

Society	Economy	Environment	Governance
Old fashioned agriculture form of education still taught in school. Old-fashioned education. Young people and women don't have land & resources. Women can't inherit land. People tending to follow urbanisation, money, buildings etc. over land for farming. Increasing individuation / urbanisation. Lack of interest by young people to agriculture. Youth not interested in farming. Collapse of social values of communities. Old traditions and beliefs Low income farmers. Change in diet following media food trends rather than use the local diet that keep us healthy.	Growing inequalities. Profits & money dimension of value. The idea that our current agricultural practice can't feed Africa. Mindset change needed. Low investment to agriculture. Poor economic value of agri-products.	Some current farmers have not fully understood the connection between land management and crop productivity. Climate change effects "flooding, draught" on farming land. Climate change & soil degradation. Flooding, landslides etc. Environmental degradation. Agricultural land conversion. Maladaptation – crops-soils-climate. The near complete neglect of organic manures/ methods in farming. High dependence on pesticides for weeds control. Low inputs/output farming system. Low on market access to agricultural products driving by farmers' associations.	Low participation of community in policy formulation. Government support? Understanding each other. Poor organisation of farmers' associations and cooperatives. No protection (for farmers) and safety frameworks for agriculture sectors. Corruption. We are governed by corporations and money.

**Table 5: STEP 2 – Ubuntu pathway:** Root causes of the present concerns as raised by the participants

Present concerns	Root causes
Climate change.	– Greed.
Land degradation. Failing crops/less yield.	– Climate change. – Over-exploitation. – Industrialization. – The mindset that "Africa cannot feed herself".
Collapse of social values of communities. Growing inequalities.	– Assume change – study stability. – Money, profit the only dimension of value.
Disconnect between technology and indigenous knowledge.	– Education systems.

**Box 4: STEP 2 – Ubuntu pathway:**

Present concerns synthesis as a list of hashtags

**Box 5: STEP 2– Ubuntu pathway:**

Present concerns synthesis as a response from “Granny” to “Christelle”

Dear Christelle,

Thank you for your kind letter! I’m happy to hear about this beautiful future. How is the community and how are the people in Ubuntu land?

I’m sorry about the climate change problems that we caused you, but I’m glad you found a way to continue developing the process we started to the future you now enjoy.

Today I went to my retired farmers association meeting where we spoke about the good old days where we shared knowledge about empowerment of our cooperative and also where we identified the relevant farmer groups. It wasn’t an easy journey to do. We are glad to hear about your stories of education hubs, access roads, train networks and the news about the preservation of produced crops. Could you share with us the details of how you got there?

Greetings from the retired farmer group and as a final advise:

Keep pushing for that no new oil, coal or tar sands fields open!

Love

Granny

**STEP 3 results – How to get to the desired future from the present**

For the Ubuntu pathway, final results from STEP 3 are presented through: (a) Box 6 including a photo and transcript of the 3 Horizons diagram, with the necessary change elements (measures and actions) to reach the desired

future that the participants brought up; (b) Box 7 with a third letter synthesizing the pathway, as a response from “Christelle” to her Granny on how the Ubuntu land future was reached. Note that, at the end of the letter (in red), the convergences and divergences to the global perspectives (about urbanisation and population growth) are mentioned.

**Box 6: STEP 3 – Ubuntu pathway: 3 Horizons diagram.**

Measures and actions to reach the desired future (photo of the 3 Horizons diagram STEP 3). The box contains a picture of the diagram and a transcription organising the actions in

four quadrants. A red asterisk (\*) denotes a divergence point among the participants (no divergences in this diagram)



	Short-term	Long-term
Upscaling the seeds-term	<ul style="list-style-type: none"> <li>Build dynamic movements for change through improved/empowered people's association groups or cooperatives</li> <li>Leaving new oil in the soil, new coal in the hole and new tar sand in the land</li> <li>Use the right language to communicate change we want</li> <li>Intensify farmers' Inter- &amp; intra- relations and interaction for better communal agriculture.</li> <li>Creation of links between stakeholders</li> <li>Intensify farmers' Inter- &amp; intra- relations and interaction for better communal agriculture.</li> <li>Education of young persons</li> <li>Capacity building</li> <li>Build coalition of like-minded change agents to address needed change: Networking, Collaboration and Alignment</li> </ul>	<ul style="list-style-type: none"> <li>Reasonable population growth by encourage drastic family planning</li> <li>Access to market for input/output</li> <li>Creation of added value to agri-products</li> <li>Sustainable intensification (crops + animals + trees)</li> <li>Influencing Policy setting -&gt; evidence and data 2)</li> <li>Alignment towards strategic goals</li> <li>People's driven policies – People's participation</li> </ul>
Breaking the present	<ul style="list-style-type: none"> <li>Limit "Individualization" system and promote engagement of community</li> <li>Raising creative thinkers rather than certificate driven education</li> <li>Don't "ADAPT" BUT "Interact"</li> <li>Promote attentive research on indigenous knowledge (for local use) that has waned with aim to use and enhance it for use today.</li> </ul>	



**Box 7: STEP 3 – Ubuntu pathway:** How to achieve the desired future (the Ubuntu land) as a response from “Christelle”.

Dear Granny,

It is with joy I receive your letter! We are all doing good, Ubuntu land is fine and our farms are flourishing.

I would gladly tell you how we did it! We started by continuing your work on building dynamic movements made up by people’s associations and cooperative groups and that curbed the individualization system of your time. We put much effort into creating open communication platforms that encourage development using our own language. We succeeded in raising creative thinkers in our schools beyond certification driven education, as you had in your time. We adopted the method of interaction with the realities of our problems instead of just adapting to them. Our agriculture hub has opened up more spaces for research on target indigenous knowledge for local use.

We nurtured links between relevant stakeholders in the agricultural businesses who are influencing policy formulation based on good evidences and data from our researches. We have also created a coalition with like-minded change agents to get a sustainable Ubuntu land.

We successfully created valued agricultural products that meet the market demands of Ubuntu land, Africa and the world.

As you know from your time, some of the assumptions were that change was not going to happen without considering high levels of urbanization and to this we have applied drastic family planning measures which reasonably limited population growth.

Love

Christelle

**Peaceful and Prosperous East Africa pathway (Eastern Africa group)<sup>19</sup>**

**STEP 1 results – The desired future for agriculture in 2050+**

Table 6 presents the transcription of the 3 Horizons diagram for STEP 1, representing the desired future and pockets of

this future in the present. In red, we mark the only point of divergence between the participants about this desired future: **whether or not to limit family size (maximum 2 children/family)**. Based on the 3 Horizons exercise, the group decided to synthesize their desired future in two different ways: as simple text describing their vision and a drawing (Box 8).

**Table 6: STEP1 – Peaceful and Prosperous EA pathway:** the desired future and pockets of this future in the present (transcription of the 3 Horizons diagram)

Society	Economy	Environment	Governance
<p>Eastern African people (80%) are food secure (access, nutrition, vanity).</p> <p>Smallholder farmers mainstream into market economy.</p> <p>A great proportion of the population (90%+) is sustainably food secure and enjoys higher quality of life.</p> <p>Gender mainstreamed across agricultural value chains (100%).</p> <p>Empowered farmers &amp; technicians.</p> <p><b>Smaller family size (maximum 2 children/family) *</b></p> <p>Strong collaboration.</p> <p><b>Seeds of this future in the present:</b></p> <p>Youth empowerment programmes.</p> <p>JP – RWEE (Rural women economic empowerment joint program) promotes:</p> <ul style="list-style-type: none"> <li>– Food &amp; nutrition security</li> <li>– Access to finance</li> <li>– Gender based policies, etc.</li> </ul> <p>Empowering rural women &amp; some men in 7 countries including Rwanda, Ethiopia, through agriculture (funded by Sida &amp;...).</p> <p>Capacity building (farmers + technicians).</p>	<p>Value addition through food processing -&gt; easy food distribution.</p> <p>Eastern Africa not relying on rain-fed agriculture 50% of arable land irrigated (2030).</p> <p>Improved agribusiness between Eastern African countries.</p> <p>Leading to:</p> <ul style="list-style-type: none"> <li>– Employment</li> <li>– Economic growth</li> <li>– Labour mobility</li> </ul> <p>Inclusive growth and shared prosperity.</p> <p>Land conservation.</p> <p>infrastructures put in place.</p> <p>Less inputs (mineral) in agricultural production.</p> <p>Eastern African Community integrated.</p> <p>Large scale commercial farming projects.</p> <p>Reduced reliance on external funding to agricultural development.</p> <p><b>Seeds of this future in the present:</b></p> <p>RYAF (Rwanda Youth in Agribusiness Forum)</p> <p>Investment in irrigation infrastructure.</p> <p>Kenya climate smart agriculture project.</p> <p>National agriculture rural inclusive growth project.</p>	<p>Value addition of agricultural products.</p> <p>Finance availability in agricultural sector.</p> <p>Environmentally friendly green revolution (sustainable agriculture).</p> <p>Increased agricultural production: quality + quantity (sustainability).</p> <p>Climate smart agricultural practices.</p> <p><b>Seeds of this future in the present:</b></p> <ul style="list-style-type: none"> <li>– Fruit trees</li> <li>– Irrigation</li> <li>– Green houses</li> <li>– Improved farm inputs</li> </ul>	<p>Post-harvest handling &amp; storage.</p> <p>Good roads to farms / accessibility.</p> <p>Sustainable agriculture mechanization &amp; improved agricultural infrastructures.</p> <p>Private sector led agriculture.</p> <p>Agricultural policies (put in place) &amp; implemented.</p> <p>Streamlined systems &amp; structures for agriculture and food systems.</p> <p>By 2050 regional (Eastern African Community) cooperation in all aspects of agriculture.</p> <p>Evidence based policies and decisions.</p> <p>Data &amp; info</p> <ul style="list-style-type: none"> <li>– generated by communities</li> <li>– used by communities</li> </ul> <p>Sustainable intensification.</p>

**Box 8: STEP-1 – Peaceful and Prosperous EA pathway:**  
 the synthesis story in the form of a text and a drawing describing the desired future

**Our Vision:**

90% of East Africans are food secure (nutrition, quantity, quality, supply) and enjoy a high quality of life in a secure environment, facilitated by climate-smart agriculture practices, climate resilient infrastructure, agriculture value addition, innovative food systems and (regional) market integration allowing inclusivity (leaving no one behind).

The right side of the figure refers to various parts of the value addition chain, that would be present in the region and not displaced elsewhere. Furthermore, it refers to building appropriate infrastructure to process agricultural products.



**STEP 2 results – Present concerns in agriculture and their deep causes**

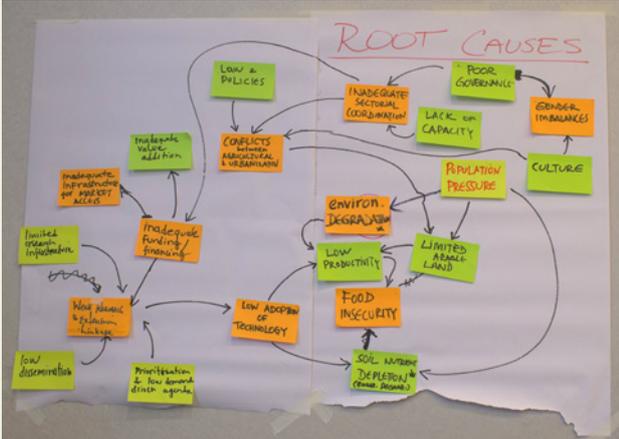
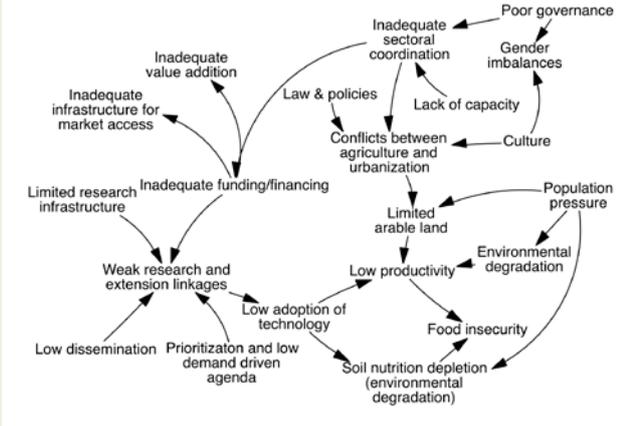
Table 7 presents the transcription of the 3 Horizons diagram for STEP 2 for the Peaceful and Prosperous EA pathway, representing present concerns. The divergences that emerged among the participants during this step are marked in red\* in the table, specifically the divergence between how the participants perceived current abundance of agricultural land. One opinion was that the area of agricultural land is

not sufficient; the opposite opinion was that there is enough agricultural land, but its use is hampered by various factors, e.g. aridity. Box 9 synthesizes the discussion core challenges and their root causes. For representing the root causes, the group opted for elaborating a causal loop diagram. The group discussed that the concerns are sometimes the root causes of other concerns. As a final synthesis of this step, the group produced a simple text summarizing the exercise core points (Box 13).

**Table 7: STEP-2 – Peaceful and prosperous EA pathway:** Present concerns (transcription of the 3 Horizons diagram)

Society	Economy	Environment	Governance
Gender imbalance in agriculture. Food insecure. High population pressure & high demand.	Limited arable land (specific for selected parts of the region) * Lack of infrastructure (hard & soft). Limited processing capacity. Overreliance on external funding to develop agriculture. Inadequate funding. Overreliance on rainfed agriculture. Limited use of modern technology (mechanization & ICT). Huge yield gap. Traditional agriculture practices. High production costs Vs Outputs. Trading in primary products.	Large tracts of arid land* Lack of feeder road to rural market. Conflict between urbanisation and agriculture. Low climate change resilience capacities. Depleted environment resources (land, water, forests). Rampant land degradation and deforestation. Lacking effort to strengthen the capacity building. Lack of qualified technology. Food insecure and climate change technologies. Inadequate linkage research & extension.	Lack of enabling environment in agricultural sector. Policies not fully backed by evidence.

**Box 9: STEP 2 – Peaceful and Prosperous EA pathway:**  
 Root causes of the present concerns as raised by the participants

Present concerns and root causes	
<p><b>Present concerns</b></p> <ul style="list-style-type: none"> <li>– Low adoption of technology.</li> <li>– Food insecurity.</li> <li>– Inadequate funding/financing.</li> <li>– Environmental degradation.</li> <li>– Inadequate infrastructure for market access.</li> <li>– Conflicts between agricultural and urbanisation.</li> <li>– Gender imbalances.</li> <li>– Weak research and extension linkages.</li> <li>– Inadequate sectorial coordination.</li> </ul> <p><b>Root causes</b></p> <ul style="list-style-type: none"> <li>– Low dissemination of research.</li> <li>– Limited research infrastructure.</li> <li>– Prioritization and low demand driven agenda.</li> <li>– Inadequate value addition.</li> <li>– Law &amp; policies.</li> <li>– Poor governance.</li> <li>– Lack of capacity.</li> <li>– Population pressure.</li> <li>– Culture.</li> <li>– Limited arable land.</li> <li>– Low productivity.</li> <li>– Soil nutrition depletion (environmental degradation).</li> </ul> <p><b>The use of a causal loop diagram was an initiative of the group. It highlights how causes and concerns are interlinked.</b></p>	 

**Box 10: STEP 2 synthesis – Peaceful and Prosperous EA pathway:**  
 Present concerns presented as a simple text.

**Present concerns:**

East African countries still suffer from food insecurity arising out of low productivity. This is associated with low adoption of technology resulting from inadequate research and development, which is a result of low funding and poor prioritization and poor dissemination.

Inadequate funding leads to inadequate investment in market infrastructure and limited value addition while environmental degradation which also compromises production arises from population pressure caused by conflict between agriculture and urbanization. This conflict is linked to culture and weak sectorial coordination.

**STEP 3 results – How to get to the desired future from the present**

For the Peaceful and prosperous pathway, the final results from STEP 3 are presented through multiple formats. Firstly, Box 11 includes a photo and the transcribed result of the 3 Horizons diagram, illustrating change elements (measures and actions) to reach the desired future that the participants brought up. Secondly, Box 12 synthesizes the discussion in the group about how their pathway contrasts to the global perspectives. The group also had a specific discussion about how to empower local communities. Finally, a letter (Box 13) written in the future to a relative, named Wanjiku, describes how they managed to face the challenges from STEP2 to reach the future described in STEP 1 in East Africa.

About divergences, again the red elements (marked with

an \* in Box 11) represent points of divergence among the participants regarding the actions and measures to achieve the desired future. Such topics relate to: (a) demographic issues (whether to decrease the fertility rate or to take advantage (“tap”) the potential of a large population, e.g. as a capacity for agriculture); (b) the type of agriculture that should prevail in the future – whether subsistence agriculture should be sustained or replaced by market-oriented agricultural types, and whether these should be centralized small-holder driven. The second paragraph in the letter (Box 5) summarized all the points of divergence among the participants of this group. Related to those, the divergences from the global perspectives are also presented in Box 4 that transcribes an additional output prepared by the participants.







### Box 12: STEP 3 – Peaceful and Prosperous EA pathway: Convergences and divergences with global models and tools for empowering communities actions to reach the desired future

Tensions and convergences between local assumptions and assumptions proposed by global models:

- **Urbanised world:** There might be alternative ways of living in rural! “Are global models thinking we will be Shanghai or New York?”
  - **Tech-based production:** What about putting people at the centre rather than technology at the centre?
  - **Population growth:** link to context and values: Multiple different visions and opinions on limiting population growth:
    - a) “Think of population not only as consumers, but as people that add value to the world. There are important nuances and qualitative aspects.”
    - b) There are different ways of empowering and education (e.g. TVT).
    - c) “Population is an asset” vs. “It is easier to provide quality education for people if they are fewer”
- How do we empower communities to solve their “problems”
- What are the tools needed for that?

Enabling environment for community empowerment:

- Ethical education
- Scientific education
- Skills education
- Mechanisms for community learning, action, and evaluation of action, assessment of progress and challenges.
- Cultivating a sense of togetherness, individual and collective responsibility
- Early education
- And unleashing the power in the youth & women
- Empowering the rural communities & small holder farmers
- Rethinking the rural-urban relation
- Rethinking of the foundations of our societies, and civilization
- Identify the forces, principles that foster cohesion, integration or lead to disintegration and collapse of order
- Promoting system thinking

### Box 13: STEP 3 – Peaceful and Prosperous EA pathway synthesis: How to achieve the desired future synthesized as a letter

Dear great-grand daughter – Wanjiku,

We learned how to bring communities to the centre stage. We learned how to achieve a common vision for shared prosperity and for a just and peaceful East Africa.

Over the years, there have been many debates about whether small-scale agriculture is viable or we should encourage large-scale commercial farming. Whether agriculture should be commercial, market-oriented, or community-oriented. Also, whether we should limit population or to find ways to see it as an asset. We still debate about whether to continue or discontinue subsidies and the role of government in supporting agriculture.

We first tackled the challenge of lack of skills at the community level. We created a culture of learning in communities – scientific community collaborates with the local community to solve grass-root problems. The local community generates knowledge themselves; they are involved in planning, monitoring and evaluation.

Traditional knowledge was harnessed and blended into a modern research system and techniques to find practical solutions to community needs. Communities in collaboration with local governments invested in education of their members starting with children, equipping us with relevant skills and attitudes.

We evolved a responsible and accountable political leadership system that was responsive to people's needs and the legal framework was put in place to allow a rapid change. The government leveraged local resource mobilization and domestic investments and encouraged public-private partnerships. Moreover, governments in partnership with development partners have invested in Climate Smart Agriculture projects and developed a robust irrigation infrastructure.

Gender gaps were closed, youth and women were empowered and incentivized for engagement with agriculture. Smallholder farmers became active, prosperous and flourishing players in agricultural markets due to regional market collaboration. Value addition was boosted to ensure that all farming communities were integrated into a market economy.

Food systems became diverse. Poverty, diseases, malnutrition and illiteracy were eradicated.

We have established a new foundation of our society and civilization.

Oh, Wanjiku, you cannot imagine the joy when you look back where we come from.

## Urugendo pathway (Southern Africa group)

### STEP 1 results – The desired future for agriculture in 2050+

Table 8 presents the transcription of the 3 Horizons diagram as prepared by the Southern Africa group during STEP 1.

The participants named the pathway after a Swahili/

Kinyarwanda word meaning “pathway”, or “direction”: Urugendo. No points of divergence regarding the desired future emerged. The participant group decided to synthesize their desired future as a letter (Box 14).

**Table 8: STEP1 – Urugendo:** the desired future and pockets of this future in the present (transcription of the 3 Horizons diagram)

Society	Economy	Environment	Governance
<p>Highly food secure society. Society without any hunger 2050.</p> <p>A strong and sustainable agricultural sector with perfect food systems feeding the entire African society and the world.</p> <p>Agriculture as a way to foster inclusion/ empower youth, women, marginalized communities</p> <p>Increased adoption of technology for data collection and analysis (e.g. for soil analysis).</p> <p>Agriculture attractive for youth.</p> <p><b>Seeds of this future in the present:</b></p> <p>Educated youth going into agriculture more now than hitherto – practicing agriculture as a business.</p>	<p>A strong agriculture sector with economically empowered farmers and farming communities.</p> <p>Investing in food storage facilities by the private sector like cooperatives and other investors.</p> <p>A well-integrated agricultural sector with better farming practices. that are environmentally friendly.</p> <p>Agriculture sustaining a sizeable number in towns living as well of the driving sector of the economy.</p> <p>Safe and sustainable food processing and conservation technologies in place.</p> <p>Promote seeds quality – seed quality means quantity.</p> <p>Highly productive agriculture whose contribution to GDP had decreased due to increased share of other sectors.</p> <p>Private sector led agriculture and food systems with government only playing regulatory function.</p> <p>Favourable terms of trade (internal and external) for African farmers so that they can fully benefit from production.</p> <p><b>Seeds of this future in the present:</b></p> <p>Mobile tech-based payment/ transfer systems (similar to Kenya’s MPESA*) applied to agricultural production may help farmers keep higher values shares.</p> <p>Government of Uganda has initiated E-voucher system invested in agro-processing facilities and distribution of inputs to farmers for increased production.</p> <p>Kenyan government invests in large- and small-scale irrigation to reduce dependence on raid fed agriculture (1.2 million acres to date).</p>	<p>Improved land husbandry and water management systems plus use of organic fertilizers and pesticides not harmful to the environment.</p> <p>Increased agricultural land through good land management.</p> <p>Cultivate enough of all types of food.</p> <p>Soil which is fertile and free of diseases.</p> <p>Urban food forests.</p> <p><b>Seeds of this future in the present:</b></p> <p>Land consolidation in Rwanda.</p> <p>Existence of environmental laws and policies in most countries.</p>	<p>To have countries without any war so that farmers can cultivate more.</p> <p>Policy that promotes competitive, profitable and progressive farm business (adequate supply).</p> <p>Eliminate inter-African market access barriers to promote stable agricultural trade.</p> <p>Climate resilient sustainable food production to be developed through regional cooperation.</p> <p><b>Seeds of this future in the present:</b></p> <p>Existing cooperation through regional economic cooperation is promising. Non-conflict production and exchange.</p>

\* MPESA is a mobile phone-based money transfer, financing and microfinancing service

## Box 14: STEP1 – Urugendo pathway: the synthesis story in the form of letter from the future

30 October 2050

Dear friend

What a wonderful Sunday morning. Young people here are cultivating large areas of land that were once barren but have now been restored because of reforestation, water towers and through improved irrigation systems. Now technology is on the way to lead us to better agriculture, where hunger is the story of the past. Everywhere is green now. The farmers (not only old women and men) are in charge of the agricultural value chains from production up to marketing through their farmer organizations. Currently, the farmers are organized into cooperatives and have invested and own agro-based business and are major exporters of agro-processed products (e.g. beer, fruit juices, etc.). The youth are outstanding in agriculture and doing what they love. Urban and peri-urban areas have also become sources of food production through intensive investments in green houses within the urban setting. There is access and usage of better and improved agriculture inputs (e.g. High yielding varieties) by the farmers with better extension services. Compared to 40 years ago, the farmers are more empowered to negotiate better prices for their produce domestically and benefiting from the improved terms of trade internationally.

Yesterday I went one hundred kilometres out of where I am now just outside Windhoek in Namibia and I found a thriving community, hunger is now history here and children are no longer stunted, malnourished and they are all going to school and doing well. I am now looking forward to taking a holiday with my family. It has not rained for a while but unlike in the past farms are still green because of improved irrigation systems. We are seeing varieties that were disappearing now plentiful and affordable at the market.

The government is very responsive by creating an enabling environment through policy and legal frameworks that has streamline the farming sector that has actually translated into the growth of national GDP and there is peace across the region.

Due to our investment in food production, safety and phyto-sanitary measures, there is access to better market (domestic and external): this region is no longer a major importer of agricultural products. In fact, we are the major exporter of food products including organic produce.

In our world today, agriculture is attractive let me call it... sexy

**STEP 2 results – Current challenges in agriculture and their deep causes**

Table 9 presents the transcription of the 3 Horizons diagram for STEP 2 (present concerns) for the Urugendo pathway. Based on the diagram, the participants clustered the present concerns into core challenges/root causes and then expressed them as newspaper headlines (Box 15). The clusters of core challenges/root causes are:

- Inadequate infrastructure
- Lack of enabling policies & legal frameworks

- Lack of multi-sector approach (planning)
- Environmental degradation
- Low inappropriate techniques +skills
- Lack of appropriate financing
- Institutional weaknesses
- Low uptake of ICT
- Inefficient market system which does not support farmers

**Table 9: STEP 2 – Urugendo pathway:** Present concerns (transcription of the 3 Horizons diagram)

Society	Economy	Environment	Governance
<p>High dependence on rain-fed agriculture.</p> <p>Limited exposure to best practices in Africa.</p> <p>There is negative attitude on agriculture in our society especially in the elite and the youth.</p> <p>Low levels of education hinder the creativity for advanced innovation.</p> <p>Lack of skills of smallholder farmers to increase quality and quantity.</p> <p>Slow transformation from traditional to modern agricultural farming.</p>	<p>Agriculture is not yet tackled as a business.</p> <p>Agriculture is taken as a non-profitable venture so why invest in it given its related risks?</p> <p>Most of the farmers are cultivating only for their own foods not for business.</p> <p>Lack of investment in both government and private sector for agriculture extension services.</p> <p>Lack of enabling policy, institutional, legal framework for the sector.</p> <p>Lack of access to affordable finance.</p> <p>Lack of adequate budget to support the sector.</p> <p>Lack of investment in agriculture value addition.</p> <p>Low priced for farmers and poor terms of trade (domestic/external).</p> <p>Most farmers do not have enough seeds because it is expensive.</p> <p>Lack of adequate marketing, agronomic tips, and insurance for planning purposes and access to finance.</p>	<p>Climate change adaptability is low.</p> <p>Land fragmentation, yielding low productivity and soil erosion.</p> <p>Deforestation that has led to environment degradation and soil erosion.</p> <p>Tendency to boost productivity through unsustainable techs (chemicals, pesticides).</p> <p>Lack of adequate investment in climate change mitigation measures.</p> <p>Not enough soil/land to cultivate and some are not fertile.</p> <p>High dependence on rain-fed agriculture.</p> <p>Poor irrigation systems.</p>	<p>Farmers organisation poorly managed.</p> <p>Low level of implementation of national targets on agriculture.</p> <p>Lack of accountability/ transparency and honesty on behalf of managers and leaders.</p> <p>Scattered sectors decisions affecting the agriculture.</p> <p>Some farmers do not cultivate because of war and conflict between countries.</p> <p>Closed national markets impeding regional cooperation (and income diversification).</p> <p>Lack of agriculture insurance schemes for crops and livestock.</p> <p>Dissatisfaction with the quality of physical infrastructure.</p> <p>Lack of enabling policy, institutional and legal framework for the agricultural sector.</p> <p>Lack of agricultural extension services.</p>



**Box 15: STEP 2 – Urugendo pathway:**

Present concerns synthesis expressed as newspaper headlines.

*Let's check our 2018 library Newspaper Headlines:*

*Urugendo pathway*

*Farmers lose money through their cooperatives due to mismanagement*

*Dairy farmers register losses due to power outage*

*Farmers' cooperative close down their businesses due to heavy taxes*

*Thousands of hectares of food crops destroyed by floods*

*Disagreement in the cabinet causes farmers to lose billions of money*

*Free farmers from middlemen*

*Farmers cry out for affordable financing*

*Farmers complain of lack of appropriate techniques in dairy farming*

*Information technology still a nightmare for farmers*

**STEP 3 results – How to get to the desired future from the present**

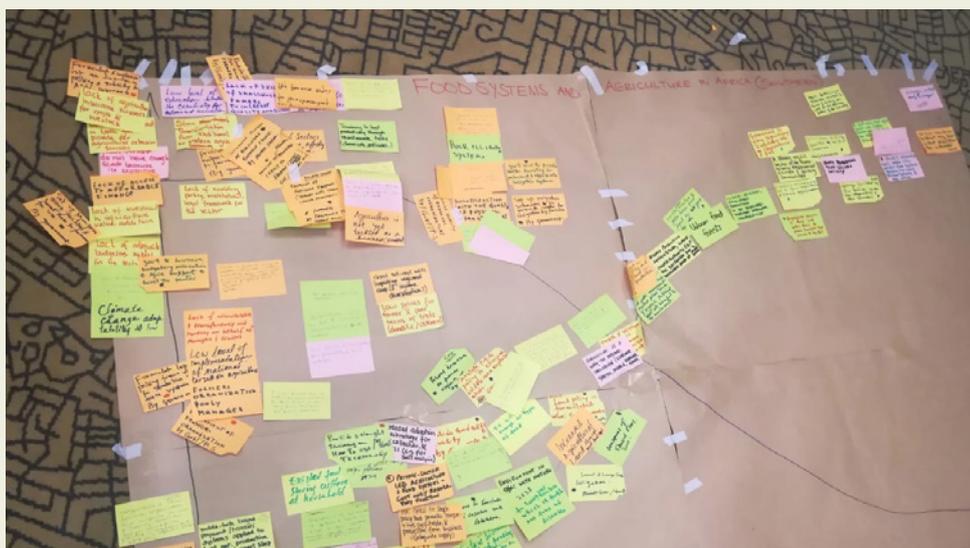
For the Urugendo pathway, the final results from STEP 3 are presented through: (a) Box 16 including a photo and the transcript of the 3 Horizons diagram, with the change elements (measures and actions) to reach the desired future

that the participants brought up; (b) the participants synthesized this step with a letter to a friend reporting how they achieved their vision (Box 17).

**Box 16: STEP 3 – Urugendo pathway: Measures and actions to reach the desired future (photo of the 3 Horizons diagram STEP 3).**

The box contains a picture of the diagram and a transcription organising the actions in four quadrants. A red asterisk (\*)

denotes a divergence point among the participants (no divergences in this diagram).



	Short-term actions	Long-term actions
Upscale the seeds	<ul style="list-style-type: none"> <li>Farmers organise learning and exposure visits for benchmarking.</li> <li>Set up agro-processing facilities and hand them to farmers for use.</li> <li>Increased provision of extension services.</li> <li>Form and implement insurance policy and subsidy to agriculture.</li> <li>Training on how to use technology.</li> <li>Develop spatial plans.</li> <li>Improve management of farmer organisations.</li> <li>Government and private sector investing in irrigation systems.</li> <li>Formulate legal and policy frameworks to streamline governance systems in farmer organisations.</li> <li>Small- and large-scale irrigation.</li> <li>Provide training to smallholder farmers.</li> <li>Provide better education.</li> <li>Government increase budgetary allocation to agriculture support to boost the sector.</li> <li>Support farmers to access domestic and external markets.</li> </ul>	<ul style="list-style-type: none"> <li>Investment in storage facilities.</li> <li>Youth and women programmes.</li> <li>Provide good quality seeds.</li> <li>Invest in dams, terracing, fertilizer.</li> <li>Fiscal incentives to foster urban food forests.</li> <li>Provide subsidised loans for youth.</li> <li>Create employment in rural areas.</li> <li>Develop trade policy to eliminate exploitation by middlemen.</li> <li>Fiscal incentives to promote exports of agricultural products.</li> <li>Form cooperatives and farmer organisations.</li> <li>Government and private sector provide physical infrastructure.</li> <li>Private sector provides agriculture equipment through leases to farmer organisations.</li> <li>Regulation and supervision of cooperatives and farmer organisations.</li> <li>Financial institutions and government provide affordable credit to farmers.</li> </ul>

**Box 17: STEP 3 – Urugendo synthesis:**

The synthesis story in the form of letter from the future

**Letter to friend**

Dear friend

I have received your reply to my letter asking me how we achieved our visions. As farmers, through our cooperative societies, we worked closely with the government to put in place an enabling environment through a legal and policy framework that streamlined our governance systems for accountability and transparency. Through development of cooperative society's policy and enactment of cooperative Act, both productivity and aggregation of our produce increased. This translated into structured marketing and hence increased incomes for us farmers. Cooperatives empowered farmers who subsequently engaged the government to create an agriculture credit guarantee scheme in addition to creating an insurance scheme for our farmers. We are happy to have been receiving timely payments and premiums and this has enabled us to invest in the improvement of our farms and to acquire agro-processing facilities. The government policies have also enabled us to access affordable credit through schemes such as credit guarantee schemes where the government acts as a guarantor to financial institutions who hitherto requires us to provide collateral which we are not able to provide.

We are also able to lease agricultural machinery and equipment from the private sector and this has contributed immensely to improvised productivity. Additionally, we are able to access cost effective agricultural extension services from both government and the private sector. Through public, private partnerships, rural feeder roads, silos and agro-processing machinery have been constructed and this has enabled better storage of produce for food security. Electricity has been extended to our region which has enabled value addition.

Farmers are very happy with the progress of the Agricultural transformation which has translated into better returns and hence increased household incomes.

Turashima abahinzi mwese

## Rainbow pathway (African continent group)

### STEP 1 results – The desired future for agriculture in 2050+

This group opted for synthesizing their results for STEP 1 in a table, they did not produce a story. Therefore, for this group, we do not transcribe the original 3 Horizons diagram, but their own synthesis and re-interpretation of the exercise (Table 10). During this process, the following major internal divergences among the participants in the group (marked with \* in the table) arose:

- The adoption of meat free diet (with serious consequences for the environment) versus the need for meat protein, the importance of herds in the livelihoods for pastoralists and

cultural attachments. The group solved this conflict by adopting as part of the desired futures diversified diets (e.g. fish, aquaculture, meat, etc.), adapted to different contexts, as written in Table 10.

- The adoption of biofortified crops (non-GMO) versus the opinion that we get target nutrients separately/more effectively (through other ways).
- Agribusiness as a source of more income, since higher volumes (of production) lower prices and leads to less for farmers (also questions about role of large corporations). This discussion was also stimulated during the world café.

**Table 10: STEP1 – Rainbow pathway:** the desired future and pockets of this future in the present (elaborated by the participants based on the 3 Horizons diagram)diagram)

Society	Economy	Environment	Governance
<p>Empower Africa – Human capital development in order for people to make decisions and the right choices they need to be informed. African led decisions based on the context. Giving knowledge and empower skills rather than depending on foreign support. A competitive society that can execute sustainable policies, &amp; programs.</p> <p>People mindset change leading to a more aware and educated society to lead to different approaches and beliefs.</p> <p>People become well aware of benefits of family planning.</p> <p>Food secure society with diversified diets, access to water and good stewardship of water resources.</p> <p>More inclusive development (gender balance, equality, etc.).</p> <p><b>Seeds of this future in the present:</b></p> <p>Mastercard Foundation: youth empowerment initiative: funding for higher studies abroad.</p>	<p>Priority given to promoting home grown agriculture and local knowledge.</p> <p>More skilled people encouraged to go into agriculture.</p> <p>Market oriented value chains and agribusiness that provide sustainable income from agriculture.</p> <p>Agricultural production that meets demand of a growing population and urbanisation.</p> <p>Well-developed infrastructures (transport, ICT, energy) that support agricultural system.</p> <p>Equitable access to finance.</p> <p><b>Seeds of this future in the present:</b></p> <p>Rwanda: Land consolidation program and crop intensification program.</p>	<p>Biofortified crops are promoted (non-GMO).*</p> <p>Good quality and resilient crop varieties with high level of productivity are cultivated.</p> <p>Environmentally friendly agricultural practices.</p> <p>Environmental protection, and restoration.</p> <p>Diversified diets (e.g. fish, aquaculture, etc.) *</p> <p>Reduction/ban of plastic use to protect the environment.</p>	<p>Capable states, and strong institutions that can deliver, with a functioning structure and accountable to their citizens.</p> <p>Political will leading to a political environment that accommodates different views and it is receptive to changes – context specific.</p> <p>Effective land use planning and management, together with prioritization and zoning: based on AEZs African governments come up with tailored plans to guide agricultural planning and transformation.</p> <p>Policies and regulations that enable participation of different stakeholders for meaningful contribution toward sustainable development.</p> <p>People-led development programmes: having a space for bottom up initiatives/people centered approach for increasing sense of ownership.</p> <p>Political decisions are made based on scientific and grounded evidence.</p> <p>Policies and legislation are made with environment at the centre of the development.</p> <p>Agricultural institutions are decentralized and close to farmers.</p> <p>Effective agricultural policies are developed and implemented.</p> <p><b>Seeds of this future in the present:</b></p> <p>In Rwanda: young people (engaging) in the political system.</p>

**STEP 2 results – Current challenges in agriculture and their deep causes**

For this STEP, the group also opted for synthesizing their results for STEP 2 only in a table (Table 11, which details and consolidates the 3 Horizons diagram), they did not produce a story. In this step, the following major internal divergences

(among the participants in the group) relate to the perception of population growth as a problem, as opposed to consumption as a problem (consumption needs to be sustainable, population can be an opportunity).

**Table 11: STEP 2 – Rainbow pathway:** Synthesis of root causes associated to the core challenges.

Core challenges	Root causes
<b>Society</b>	
Migration/brain drain	<ul style="list-style-type: none"> <li>– Lack of patriotism</li> <li>– Difficult situations / conflicts</li> <li>– Lack of opportunities</li> <li>– Weak governance and lack of strong institutions</li> </ul>
Power inequality	<ul style="list-style-type: none"> <li>– Weak governance and lack of strong institutions</li> </ul>
Poor quality of education	<ul style="list-style-type: none"> <li>– Weak governance and lack of strong institutions</li> <li>– Lack of amenities</li> <li>– Affordability</li> </ul>
Lack of universal health and education	<ul style="list-style-type: none"> <li>– Weak governance and lack of strong institutions</li> <li>– Lack of amenities</li> <li>– Weak financial capacity</li> </ul>
High population growth	<ul style="list-style-type: none"> <li>– Education</li> </ul>
<b>Society</b>	
Limited access to finance	<ul style="list-style-type: none"> <li>– Lack of financial institution in rural areas</li> <li>– High transaction cost</li> <li>– Purchasing power</li> </ul>
Lack of access to infrastructure (roads, IT, energy)	<ul style="list-style-type: none"> <li>– Weak governance and lack of strong institutions</li> <li>– Affordability</li> </ul>
Low human capital	<ul style="list-style-type: none"> <li>– Weak governance and lack of strong institutions</li> <li>– Weak financial capacity</li> </ul>
Ignoring indigenous knowledge	<ul style="list-style-type: none"> <li>– Doubting the quality</li> <li>– Outdated education system</li> </ul>
Idle/ unused local resources	<ul style="list-style-type: none"> <li>– Lack of knowledge and skills</li> <li>– Poor mindsets</li> </ul>

Core challenges	Root causes
<b>Environment</b>	
Climate change	<ul style="list-style-type: none"> <li>– Unsustainable use of natural resources</li> <li>– Lifestyle</li> <li>– Lack of access to modern technologies</li> <li>– Lack of political commitment to international agreements</li> <li>– Lack of global partnership</li> </ul>
Land/forest degradation	<ul style="list-style-type: none"> <li>– Unsustainable land use</li> <li>– Poverty</li> <li>– Lack of leadership</li> <li>– Conflict</li> </ul>
<b>Governance</b>	
Corruption/ abuse of power	<ul style="list-style-type: none"> <li>– Greed</li> <li>– Fear</li> <li>– Lack of patriotism</li> </ul>

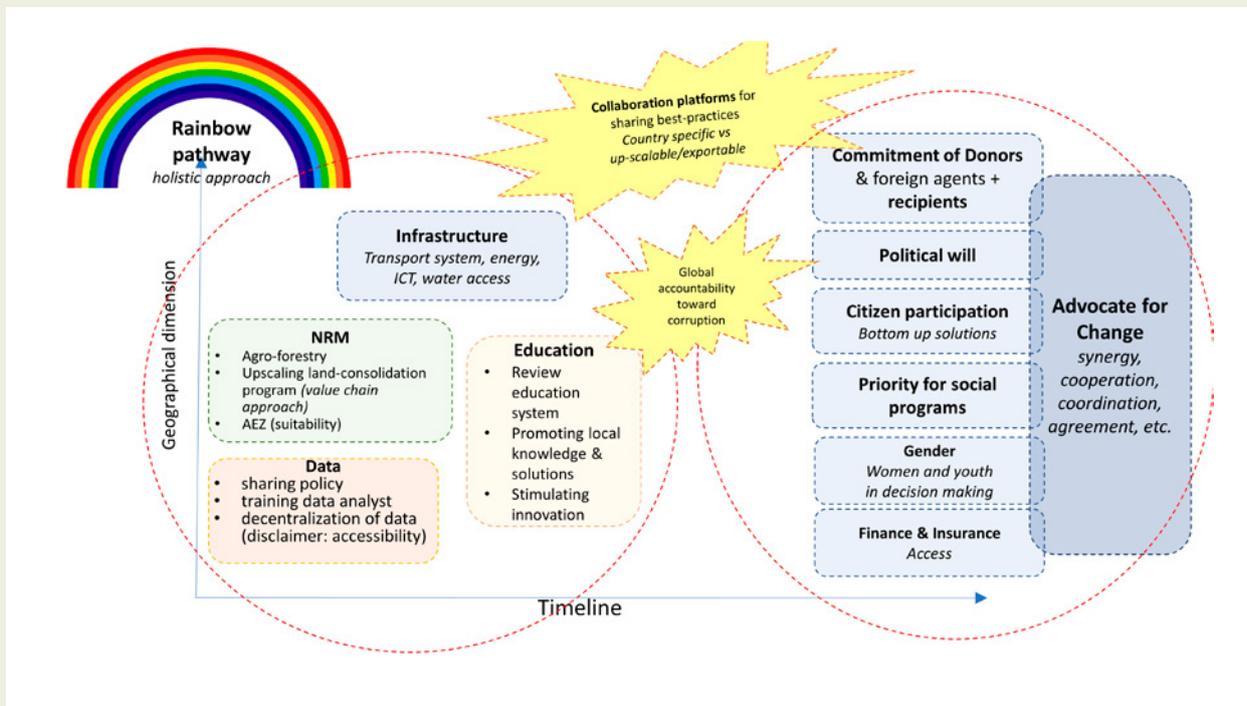
**STEP 3 results – How to get to the desired future from the present**

For the Rainbow pathway, the final results from STEP 3 are: (a) Box 18 including a synthesis diagram organising in temporal and spatial scale the main actions in their pathways. The only divergence in this step relates to having

social democracy as the political ideology governing Africa. They solved this with a more general formulation “priority for social programs”, see Box 18.

**Box 18: STEP 3 – Rainbow pathway: results for the Rainbow pathway (core actions/measures along time and space dimensions).**

A synthesis diagram organised in temporal and spatial scale including the main actions in their pathways



**Two actions** are considered essential in the transformation: Creation of collaboration platforms for sharing best-practices and global accountability towards fighting corruption.

**Short term actions:** actions that can be managed with a certain degree of decentralization, such as development of infrastructure, water access and energy systems, and actions that require coordination at national level in order to be implemented, such as implementing educational program, promoting local knowledge and solutions and stimulating innovation. Management of natural resources falls under this category, and includes promotion of agro-forestry, and upscaling land-consolidation programs. Emphasis is given to data and the creation of a repository of data to better inform decision making.

**Long term actions:** related to the need to “advocate for change”, and require more time to be achieved since they depend on cultural and behavioural changes and on high level of coordination between different stakeholders and policies levels. They require synergy, cooperation, coordination and formal agreements in place. For these changes to happen there is the need of political will and to enable an environment that strongly support local knowledge and solutions vis á vis ‘imported’ knowledge and solutions. The system is seen as inclusive, with women and youth involvement in decision making at the core of it. Commitment from donors would be requested to identify long lasting changes vis á vis projects’ timed interventions. Access to finance and insurance for citizens are key to promote equal growth together with social programs focused on citizens’ empowerment.

# References and notes

- Existing scenarios include those of the Integrated Assessment Models (IAMs). These are simplified, stylized numerical approaches to represent enormously complex physical and social systems. See the IPCC's Working Group III (WG3).
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3. Seeds are initiatives of a good future that are exiting in the present, but to a smaller scale.

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14. For more information and other applications of the framework, please see: Sharpe, B., A. Hodgson, G. Leicester, A. Lyon, and I. Fazey. 2016. Three Horizons: a pathways practice for transformation. *Ecology and Society* 21(2):47. <http://dx.doi.org/10.5751/ES-08388-210247> H3 Uni: A university for the third horizon.2018. <http://www.h3uni.org> Kate Raworth is presenting the use of 3Horizons in the following video: [https://www.youtube.com/watch?v=\\_5KfRQJqpPU](https://www.youtube.com/watch?v=_5KfRQJqpPU)

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16. One of the participants added some comments after the workshop. Because these comments changed the content of the report, we do not include them in the tables. These comments related to Table 3:

  - Affordable locally produced food crops are accessible to all.
  - Easily accessible markets (for agricultural products and for farmers to purchase farm inputs)
  - Economy at service of society (not other way around)
  - Subsistence agriculture will completely transform (increase productivity and crop quality)
  - Reinforcing intra-African markets.

The same participant also noted that subsistence farmers are not a feature of this future. The participant also commented on the zero CO2 emissions: “we need to be realistic: Energy for food production is clean with reasonable CO2 emissions (not zero)”. To the point “A farming system fully organic”, the participant added: An integrated farming system that includes organic and reasonable use of chemical inputs.

17. One of the participants added some comments after the workshop. Because these comments changed the content of the report, we do not include them in the tables. This comment related to Table 4:

  - The participant suggested the following point: Old-fashioned education to be replaced by to Old-fashioned agricultural extension method

18. The original one was “Towards a Food Secure, Peaceful and Prosperous East Africa”

19. This step of the exercise is important as a preparation for discussing the actual pathways (and eventually to inform future quantitative/modeling analysis). In future dialogues, we will explicitly include the development of causal diagrams in the process (see Conclusion section – Recommendations for future dialogues).

20. Following the STEPS centre paradigm of first “opening up” to multiple perspectives, appreciating the existing pathways: [https://stepscentre.org/wp-content/uploads/STEPS\\_Pathways\\_online1.pdf](https://stepscentre.org/wp-content/uploads/STEPS_Pathways_online1.pdf)

21. For further information about this topic, see the DIE report: “Beyond the Agroecological and Sustainable Agricultural Intensification Debate: Is Blended Sustainability the Way Forward?”, Jonathan Mockshell and Josey Kamanda, Discussion Paper / Deutsches Institut für Entwicklungspolitik ISSN 1860-0441, Bonn, 2018.

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26. According to the IPCC's Working Group III (WG3), Integrated models are simplified, stylized numerical approaches to represent enormously complex physical and social systems. Important input assumptions include population growth, baseline economic growth, resources, technological change, and the mitigation policy environment. However, they do not structurally represent many social and political forces that can influence the way the world evolves. The models use economics as the basis for decision making. This may be implemented in a variety of ways, but it fundamentally implies that the models tend toward the goal of minimizing aggregate economic costs of achieving mitigation outcomes. The models also typically assume fully functioning markets and competitive market behavior.

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32. In fact, in one of the plenaries there was a comment that African concerns are more focused on adaptation than on mitigating (other countries') emissions (and leading to questions about which compensation mechanisms would be in place and how this would affect small farmers)
33. Collste, D., Pedercini, M., & Cornell, S. E. (2017). Policy coherence to achieve the SDGs: using integrated simulation models to assess effective policies. *Sustainability Science*, 12(6), 921–931. <https://doi.org/10.1007/s11625-017-0457-x>
34. A significant point in the design of the Second Dialogue was that funding was not provided for the invited stakeholders to travel to Kigali, so most of the accepted invitations came from Eastern Africa (although many were born or experts in the other regions). Maybe as a result of this, the division of groups according to a geographic criteria proved useful for fostering the emergence of diversity between the pathways, but it did not lead to regional specificities in general. The gender ratio of the event was not balanced – 7 women: 24 men (23%).
35. In fact, during the last phase of preparation of this report, we learned one of the participants actually applied the method to discuss pathways to the SDGs in an Italian city. See: <https://twitter.com/JacopoBencini/status/1096833769301032960> and <https://twitter.com/GiovaGraziani/status/1096728194739290112>
36. Schultz, M., T. Hahn, N. Hällström, and C. Ituarte-Lima. 2016. The Biggest Single Opportunity We Have Is Dialogue-Dialogue Seminars as a Methodology for Transformative Social Learning and Conflict Resolution in International Environment Negotiations, SwedBio at Stockholm Resilience Centre. This Is a Modification of a Paper with a Similar Name under Review in *International Journal of Biodiversity Science, Ecosystem Services & Management*.
37. Such divergences and branching points could for instance be a rural versus a total urban future; industrial versus agroecology; large scale versus small farms, land sharing versus land sparing; farmers subsidies like in the US and EU or not.
38. At the beginning of the third step of the Second African Dialogue, the break-out groups compared the content of their diagrams with the global scenarios that had been presented. They were asked to consider what was common and what was different between the global model scenarios and the pathways discussed by the participants. The facilitators noted the divergences on a flip chart. Also, the groups went back to consider the root causes that had been noted down during Step 2.