EOA
ECOLOGICAL ORGANIC AGRICULTURE

PELUM ASSOCIATION
Networking for a greener Africa.

LESSONS LEARNED AND GOOD PRACTICES IN

ECOLOGICAL ORGANIC AGRICULTURE-INITIATIVE (EOA-I)

EXPERIENCES FROM KENYA THAT CAN BE OF GENERAL APPLICABILITY

APRIL 2020

Supported by:
Swedish Society for Nature Conservation

This Publication has been prepared with support of:

EOA
ECOLOGICAL ORGANIC AGRICULTURE

Swedish Society
for Nature Conservation

The views herein shall not necessarily be taken to reflect the official opinion of Pelum Kenya funding partners.

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LIST OF ACRONYMS

BDS	Business Development Services
BvAT	Biovision Africa Trust
CSOs	Civil Society Organizations
CLOs	Country Lead Organizations
EOA	Ecological Organic Agriculture
EOAI	Ecological Organic Agriculture Initiative
PELUM	Participatory Ecological Land Use Management
KOAN	Kenya organic Agriculture Network
M &E	Monitoring and Evaluation
PIPs	Pillar Implementing Partners
SACDEP	Sustainable Agriculture Centre for Development
SMEs	Small and Medium Enterprises
SSNC	Swedish Society for Nature Conservation

FORWARD

Over the past six years, PELUM Kenya together with its partners in Kenya and in the region have been implementing the Ecological organic agriculture initiative (EOA-I). This is an an African-led initiative aimed at promoting organic farming in Africa, as a response to the African Heads of States Decision EX.CL/Dec.621 (XVII) on Organic Farming that was made following the report of the Conference of Ministers of Agriculture held in Lilongwe, Malawi in 2010. The overall Goal of EOAI is to mainstream EOA into national Agriculture systems, policies and programmes by 2025 in order to improve agricultural productivity, food security, access to markets and sustainable development in Africa.

In the course of the implementation of this Initiative, several good practices have been identified while at the same times, there are some areas that need to be improved. In order to ensure that these valuable lessons are not lost or forgotten in the process, PELUM Kenya with the SSNC support has decided to document these practices for wider sharing and scaling up. It is envisaged that these lessons will provide useful insights and help like-minded initiatives to increase their effectiveness and efficiency as they roll out new initiatives in future.

Sharing lessons learned from the implementation of the EOA Initiative have the following effect:

1. Help the partners to promote horizontal and vertical learning
2. Help partners working together avoid repeating same mistakes
3. Help the partners to identify innovative approaches and good practices for scaling up.

The document captures lessons from the implementation of different phases of the six pillars of the EOAI: Research, training and Extension (RTE); Information and Communication (I&C) Value Chain and Market Development; Networking and Partnerships; Policy and Programme Development; and Institutional Strengthening. These activities include local, national and regional activities which include organizing and holding training workshops, learning, exposure and exchange visits

First, we appreciate the staff of the partners, PELUM Kenya, SACDEP, KOAN, BvAT for their efforts to implement the project activities. We recognize the huge role they have played to achieve the outcomes and ultimately achieve the goal for which EOAI was established. We also appreciate the farmer groups and individual farmers who play a key role in applying the knowledge and the EOA principles on the ground. This is actually what makes the anticipated outcomes to be realized.

Applying these lessons will therefore enable proper delivery of the benefits of the initiative to the farmers we work with.

We thank the Swedish Society for Nature conservation (SSNC) for supporting the EOA Initiative. Overtime, SSNC has proven to be a reliable partner in accompanying PELUM Kenya and some of its partners in their quest to promote EOA and help improve the livelihoods of smallholder farmers especially women and the youth.

We urge the partners to read the lessons in this document and apply the knowledge to help improve their service delivery and implementing their mandate. .

We realize that some of the recommendations may have been addressed through the various processes undertaken by BvAT and PELUM Kenya. In case, the readers come across such, we seek their indulgences.

Mr. Zachary Makanya
Country Coordinator, PELUM Kenya

ACKNOWLEDGMENT

This booklet is the result of collection of information gathered from long time experience implementing the Ecological Organic Agriculture Initiative (EOAI) and also working with the small scale farmers in EOAI.

PELUM Kenya acknowledges all the partners and Individuals who directly or indirectly supported the process of developing this booklet. Special appreciation goes to

- Swedish Society for Nature Conservation (SSNC) for financial support
- The following EOAI partners in Kenya who have relentlessly over the years developed reports that have been greatly used in this process
    - Biovision Africa Trust (BvAT)
    - Kenya Organic Agriculture Network(KOAN)
    - Sustainable Agriculture Community Development Programme(SACDEP) Kenya
    - Egerton University

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ABOUT PELUM Kenya

PELUM Kenya is a network currently comprising of 52 Member Organizations (MOs) comprising Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs) and Faith based Organizations (FBOs) and currently reaching over two (2) Million small scale farmers, pastoralists and fisher folks.

The network is mandated by its members to promote Ecological Land Use Management *(elum)* practices and principles in Kenya through networking, capacity building, information sharing and advocacy with an aim of improving livelihoods among small scale farmers, pastoralists and fisher folks. *Elum* principles and practices entail various agro ecological practices promoted by PELUM Kenya network such as organic agriculture, sustainable agriculture, agroforestry, conservation agriculture, bio intensive agriculture, biodynamic agriculture and permaculture.

PELUM Kenya is also part of the greater PELUM Association family operating in 12 countries: Kenya, Uganda, Tanzania, Ethiopia, Rwanda, South Africa, Lesotho, Botswana, Eswatini, Zambia, Zimbabwe and Malawi who jointly reach over 10 Million small holder farmers. In addition, PELUM Kenya is well linked and connected to many NGOs, networks, universities and research institutions. It is therefore in a pole position to scale-up, replicate best practices, results and information to reach many communities in Africa and beyond.

Vision:
Empowered and prosperous communities deriving their livelihood from sustainable land use

Mission:
To Promote Ecological Land Use Principles and Management Practices for improved Livelihoods among Small scale Farmers and Pastoralists in Kenya

Core Values:
- Commitment to Networking and Partnership
- Transparency and Accountability
- Innovativeness
- Equity and Justice
- Professionalism

The Principles that drive PELUM Kenya
1. Showcasing the diversity of Ecological Agricultural practices amongst members within and without the Network.
2. Enables learning for experiences and best practices sharing among members & other actors through networking with others.
3. Ensure that PELUM Kenya is a member-driven Network.
4. Encourage and support innovativeness across the Network.
5. Always striving towards an ecosystem that is healthy and sustainable.
6. Advocate on Agricultural ecological issues in favour of small scale farmers & pastoralists.
7. Always being accountable to ourselves and to our stakeholders
8. Promoting inclusive practises at all levels as the basis of ownership, empowerment and sustainability.
9. Recognizes participation as an enabling & empowering process (everybody's opinion matters, participation is drawn from the members, enhances ownership of the processes, has the strength of inclusiveness, accommodates diverse opinions and involvement the people going.)under this principle, gender equity and community diversity is accommodated

2 BACKGROUND OF EOAI AND INTRODUCTION

2.1 Background of EOA-I

The Ecological Organic Agriculture Initiative (EOAI) for Africa is an African-led initiative aimed at promoting organic farming in Africa, as a response to the African Heads of States Decision EX.CL/Dec.621 (XVII) on Organic Farming that was made following the report of the Conference of Ministers of Agriculture held in Lilongwe, Malawi in 2010. The initiative is being implemented in interrelated Pillars that complement each other in addressing different facets of ecological organic farming, with the aim of eventually rolling it out to the whole of the Africa Continents through the Comprehensive Africa Agriculture Development Programme (CAADP) under the New Partnership for Africa's Development (NEPAD); a programme of the African Union (AU).

The overall Goal of EOAI is to mainstream EOA into national Agriculture systems, policies and programmes by 2025 in order to improve agricultural productivity, food security, access to markets and sustainable development in Africa.

KEY ANTICIPATED OUTCOMES

1. Scientific and indigenous knowledge, technologies and innovations on Ecological Organic Agriculture (EOA) increased.

2. Information and communication on EOA approaches, good practices (production, processes, and learning systems) developed, packaged and disseminated.

3. EOA product value chain mapping, data collection, opportunity analysis and product/input vetting conducted.

4. Business Development Strategies (BDS) for target businesses along value chains developed.

5. The market share of EOA quality products at the national, regional and international markets increased.

6. Functional partnerships and networks at national, regional and continental levels realized.

7. A harmonised understanding and awareness of the value and benefits of ecological organic agriculture (EOA) among various stakeholders realized.

8. Integration and alignment of EOA into National governments and Regional Economic Communities (RECs) policies, plans and regulatory frameworks of the agriculture sector and other relevant line ministries realized.

9. Well governed, efficient and effective EOA Institutions developed.

EOA envisions achieving the stipulated results through the following pillars;

The six pillars are as below

- **Pillar 1.** Research, Training and Extensions (RTE) Pillar: Understanding research and training gaps within EOA value chains and undertaking activities to fill them.
- **Pillar 2.** Information and Communications (I&C) pillar: Creating awareness and strengthening EOA extension support systems through diverse information and communication strategies, product and technologies.
- **Pillar 3.** Value Chain and Market Development (VCD) Pillar: Stimulating development of sustainable markets and increase trade in traditional and high value agricultural produce both at domestic and export levels within EOA.
- **Pillar 4:** Networking and Partnership (N&P) Pillar: Promoting engagement by relevant stakeholders including governments, farmers, civil society, private sector and international community.
- **Pillar 5:** Policy and Programmes Development Pillar: Supporting the development and implementation of enabling policies and programmes.
- **Pillar 6:** Institutional Capacity Development (ICD) Pillar: Supporting and equipping professionals with skills and competencies to promote EOA in Africa.

2.2 INTRODUCTION

The EOA-I Initiative is aware and acknowledges that there are valuable lessons learnt in the process of implementing the Initiative both nationally and regionally. Towards ensuring that these valuable lessons are not forgotten in the process, PELUM Kenya under the SSNC support was mandated to document these lessons with the ultimate purpose of providing the EOA-initiative with information that can increase its effectiveness and efficiency in future. Additionally the lessons can be used to design strategies that can be used for similar programmes.

The lessons compiled in this booklet were gathered from:

- Progress reports
- Evaluation reports
- Organizational Capacity Assessment (OCA) report undertaken by BVAT
- Monitoring and Evaluation reports
- Partner review Meetings

Organic agriculture is described as “a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity”. The term biodiversity means supporting many different crops

Ecological agriculture fosters biodiversity that is resilient to the impacts of climate change (Ensor, 2009)

Evidence by a United Nations (UN) report reveals that smallholder farmers can double food production within 3-10 years, in critical regions when ecological-based improved methods for farming are applied http://www2.ohchr.org/english/issues/food/annual.htm

3 LESSONS LEARNED FROM VARIOUS PILLARS

3.1 Lessons in value chain and Market Development Pillar

3.1.1 Value chain approach in production has increasingly been seen as a better approach to capture the market if ecological farming is to be beneficial to farmers.

3.1.2 It is also desirable to have a market systems/ facilitation element. However it must be noted that it will involve building capacity of local (Business Development services) BDS services providers who can provide such services. These could be individual youth or groups and Small and Medium Enterprises. Subsequently whenever a farmer adopts EOA practices and is keen to increase acreage, they can easily make use of BDS service providers. Increase in scale of production at farmer level contributes to reduction on unit cost of production that would then be reflected through competitive pricing

3.1.3 There is no readily available data and information on the number of organic farmers, volume of products, markets and sales at the national level. It is therefore desirable that the project works with national statistical authorities to include such aspects of organic agriculture in their periodic surveys. In addition, the project can also undertake surveys to gather and analyse such data and information.

"Organic produce or products are those produced and processed through a system that encourages biological natural processes on the farm, allows farm animals to exhibit natural behaviour and excludes the use of synthetic pesticides, chemical fertilizers, antibiotics and genetically modified organisms."

3.2 Lessons from Research, Training and Extension Pillar

3.2.1 There is need for deliberate efforts to introduce practices and technologies that are geared and friendly towards the different categories of youth, women and other vulnerable groups. This decision should be considered at the point of value chain selection. This will ensure proper targeting of the desired groups, introducing initiatives that are relevant and can produce the desirable results

3.2.2 The youth are not yet very active in some of the EOAI initiatives because there is a tendency for them to take up quick income generating activities yet EOA like any other technology in agriculture is slow albeit a sure way of earning income. The initiative over time has learnt that working with youth in different projects require close monitoring if the element of sustainability is to be realized.

3.2.3 Farmers learn more from peers which leads to faster technology adoption. There is therefore need to encourage peer learning within the groups and amongst the group members if maximum impact is to be realized. This should entail practical learning sessions such as exchange and learning visits among farmers.

3.2.4 It is advisable that more farmers in future should be supported to participate in activities such as exhibitions and trade fair to serve as a motivation on the potential of organic agriculture, serve as learning on exhibition skills and quality packaging among others

Making Animal Manure Tea

Requirements

Animal manure (cow dung/poultry manure), Drum, Water, Sack and string, A strong stick, Polythene material

Procedure

- Take a drum and add water till it reaches half
- Take a sack and add animal manure
- Tie the sack and supporting it with a stick, put into the drum. Ensure that the water does not pass the tied point and the sack is not touching the drum
- Cover with a polythene paper
- After 7 days, shake the sack
- Repeat that till 21 days are over when it will be ready for use

Making Plant Tea

Requirements

Drum, Water, *Tithonia diversifolia* plants (vetch, comfrey may also be used)

Procedure

- Take a drum
- Put the Tithonia plants into the drums. The plants should be tender, just before they flower.
- Add some water till they cover the leaves
- Cover the top of the drum with a polythene material
- After 7 days, shake the drum and cover
- Repeat the same procedure until day 21 when it will be ready for use.

Farmers showcasing their indigenous seeds and traditional foods during Green action week celebrations in 2019

Farmer showing field officers his vermi compost

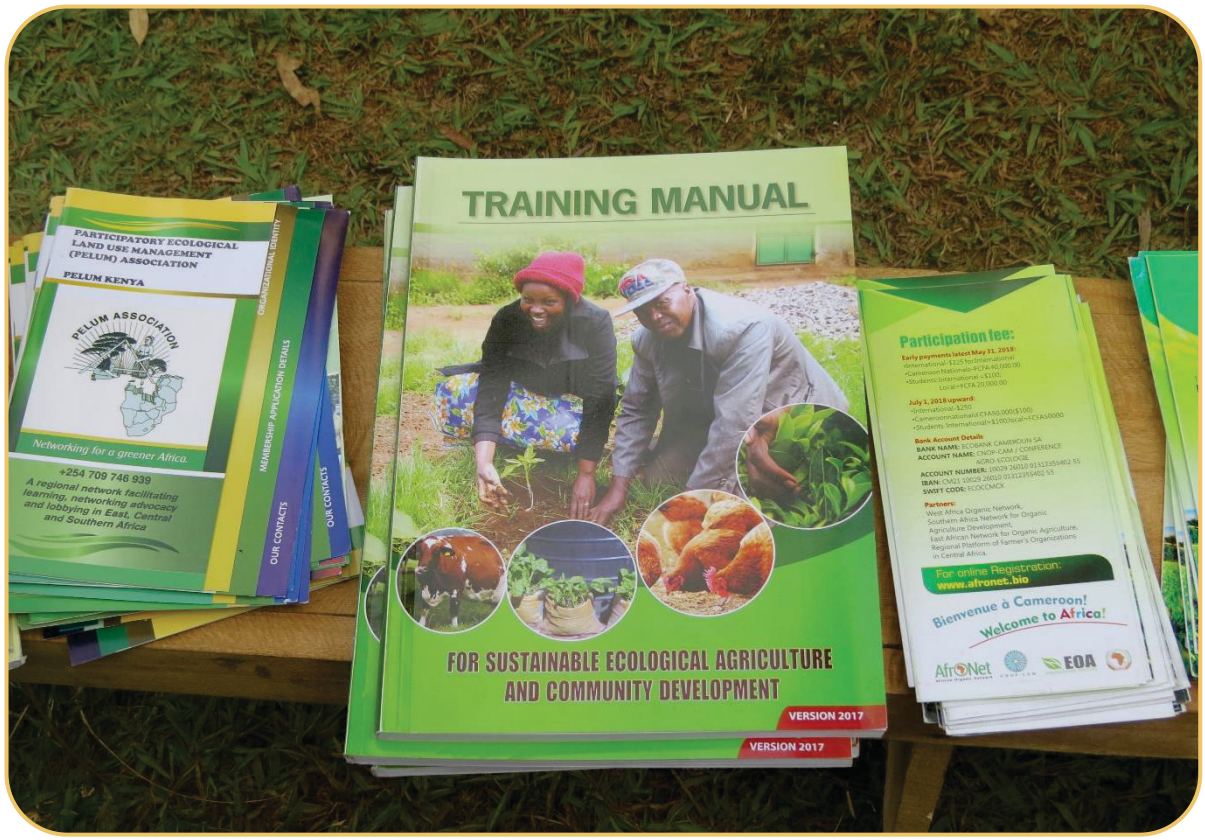
3.3 Lessons from Information and Communication Pillar

3.3.1 It is true that organic farmers face serious competition from conventional farmers and also proponents of chemical inputs. They need techniques to beat this competition and key to this will be accessing agricultural information, market intelligence and price information.

3.3.2 Appreciating and using the farmer's indigenous knowledge makes it easy to reach the farmers and change their attitude towards EOA and embrace it. Especially when dealing with people who tend to be a bit rigid; the initiative has slowly learned how to work with locals to be part and parcel of their systems/indigenous ways of doing things and with time the communities can in turn be helped to adopt technologies in EOA

3.3.3 Translating booklets / brochures etc. in local languages is a good way to reach a wider audience especially in the rural areas. This should be provided in easy to read and summarized formats.

3.3.4 It is important to share research findings and reports on Ecological Organic Agriculture with various governments to stimulate thinking and support for organic agriculture. Additionally, all potential stakeholders should be taken through an understanding of organic agriculture to ensure maximum support.



Some of the IEC materials developed for awareness and training purposes

3.4 Lessons from Networking and Partnership Pillar

3.4.1 The EOAI implementers have learnt that going through structures such as, opinion leaders, farmer champions and students can facilitate the faster spread of the EOA practices

3.4.2 Having a stakeholder forum at national, regional and continental levels where EOA stakeholders can share and have discussions on various project results, sharing best practices and exchange ideas is key to furthering EOA-I agenda.

3.4.3 Consultative partner meetings prior to programme implementation are always very useful, since there are many issues that can be clarified and improved before implementation kicks off. Inception and planning meetings with Pillar implementing partners (PIPs) reduces setback in management of the project at the country level since it increases understanding of activities by the partners. Furthermore, holding regular project review meetings helps in the partners appreciating the progress being made and making good areas that needs rectifications and addressing emerging challenges.

3.4.4 It is important that capacities and capabilities organizations implementing EOAI are understood by undertaking Institutional Assessments and due diligence exercises and availing resources to address the identified weaknesses and put efforts to strengthen the organizations.

3.4.5 It is desirable to have various partnerships on board in some of the EOA-I activities e.g partnerships with business communities, academia, other CSOs etc. This gives visibility and spreads the impact to the EOAI agenda. In the EOA fraternity, different stakeholders and partners come with different strengths and experiences that can be utilized to further deepen the EOAI agenda. There is therefore a great need to strengthen complementarity with other partners.

Ecological organic production systems can ensure and sustain local food security and sovereignty, ecosystem services for rural welfare and biodiversity conservation. It is acknowledged that small-scale farmers already produce 70% of the world's food. And that following agroecological and organic principles and practices small African farmers can produce adequate food to feed the continent sustainably, provided they have secure access to land, water, seeds/breeds and other natural resources.

Procession during Green Action Week

4. LESSONS LEARNED ON IMPACT REALIZATION AND SUSTAINABILITY

4.1 Sourcing and harmonization of streams of funding, coordination, monitoring and evaluation is still key for impact creation and scale-up. At all times resources are needed for developing and scaling up the initiative at country level and to majority of small-scale farmers at country level.

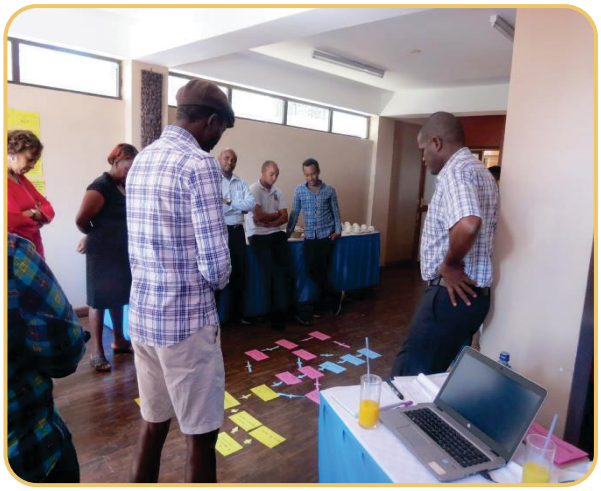
4.2 To realize the aspirations of EOAI and increase its impact, Country Lead Organizations (CLOs) need to come up with own initiatives and seek funding for them in order to support EOA in their Organizations, countries and in the region

4.3 Spreading activities too thin in some cases may led to low impact of those activities. Impact will be faster realized if implementing organizations in-country crowd in, in one project site or region and focus on similar value chains. There is need for ensuring coordinated value chain not necessarily crowding in.

4.4 Capturing success cases and stories of change from the onset of implementation enables capturing results later on quite easy and encourages results-based reporting. There is however the need to conduct training in writing stories of change/success stories/case studies and most significant changes etc. amongst partners.

Calcium extraction from bones

- Gather bones from dead animals
- Light a fire: the fire should be strong enough to provide adequate burning
- Place the bones on the fire to burn until they turn white completely. The bones must turn white for the carbon to be extracted. Black colour is an indication that carbon is present, and that the calcium has not been fully extracted
- Remove the bones from the fire and crush to a fine powder
- The powder contains the needed calcium and is ready for application to the soil.



EOAI partners in the region being trained on M & E

RSC Members Meeting state minister of agriculture, Ethiopia

5. LESSONS LEARNED FROM SEMINARS, SYMPOSIUMS AND TRAINING WORKSHOPS

5.1 Any training, seminar, symposium and workshops held should be communicated earlier and the event timed so that it does not clash with other major events in the region that may reduce its impact.

5.2 Piggy backing on different events is effective in saving costs and in attracting many participants. However, the schedule of the event should be carefully chosen not to have conflict with other relevant fora meetings and events in order to secure the targeted participants.

5.3 It is important that all participants receive reading materials well in advance to facilitate active participation during the sessions.

5.4 Representatives from farmers or speakers who share experience of “reality” as practitioners should be allowed and encouraged to make valuable contributions to workshops.

5.5 In some cases engaging the services of a professional meeting’s manager or a workshop facilitator is more efficient and cost effective in preparing for and conducting a training seminar/workshop than assigning the tasks to “in house” person. However, the cost of this should be considered. Also the in house Officer should carefully help in the design of the workshop since he / she knows the outcomes and results expected from the workshop.

5.6 It is important for participants in workshop, conference or an event to come up with action points that they will implement at an individual and organizational level. Such action points should be sent to the CEOs of their respective organizations.

5.7. It is important that the workshop / conference and event organizer or the M & E Officer to make concerted efforts to make follow-ups on the workshop participants. If the workshop participants know that they will be followed, they tend to implement their action points more and this ultimately increases the impact of the workshop, conference or event. .

Sunken Beds

Sunken garden beds act as if they were a valley instead of a mountain (raised bed). Valley landscapes tend to have more accumulated water, be richer in organic matter and boast more biodiversity. While raised beds do have their advantages, there is the obvious pattern recognition that raised beds dry out more quickly than sunken garden beds.

How to build a sunken bed

- A sunken garden bed is easy to create, though some digging is required. Creating sunken garden beds is done much like a typical garden but instead of building the soil at or above ground level or raised beds, it falls below the grade.
- Dig the topsoil out of the designated planting area about 4-8 inches (may go up to a foot with deeper plantings) below grade and set aside
- Dig out the deeper clay soil beneath and create small hills or berms between rows
- Amend the excavated topsoil with organic matter, like compost Return it to the dug-out trench
- Now the sunken garden is ready for planting

Farmers showcasing their seeds during an exhibition in Meru County

Farmers showcasing organic pumpkin during climate resilience training in Nyanza Zone

Networking for a greener Africa.

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