Value chains and development of green jobs – case study on coffee and rice

2021 Beahrs Environmental Leadership Program

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Project background

Main objectives:

- Address environmental and social challenges.
- Identify green job opportunities.

Background:

- Coffee and rice are among the crops with the largest production areas in the world.
- Coffee (East Africa) cash crop.

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- Rice (Southeast Asia) staple crop.
- Smallholder farmers and conventional production practices.





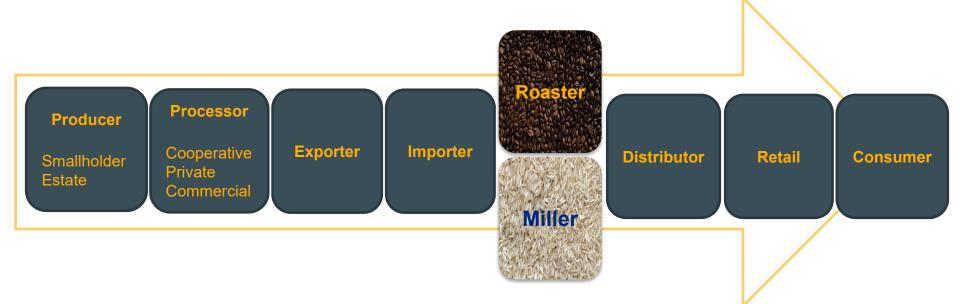
Coffee harvest on Kenya's Mountain View Farm. Bv Joan Wangari Kariuki (https://www.saveur.com/kenva-coffee-trend/).



Rice farming in Southeast Asia (https://www.irri.org/ where-we-work/countries/southeast-asia).

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Project background

 Green jobs are decent jobs that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency (ILO definition).

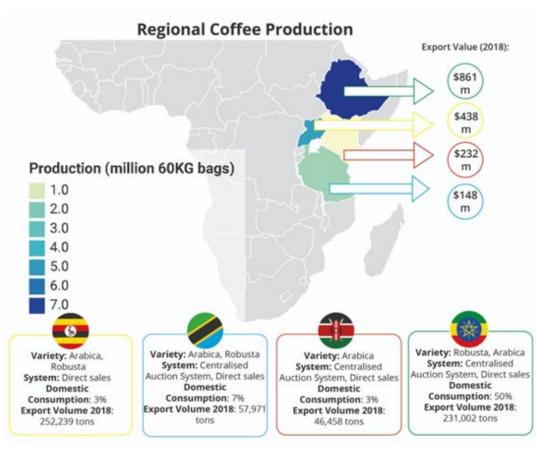


Source: International Labour Organization (https://www.ilo.org/global/topics/greenjobs/news/WCMS_220248/lang--en/index.htm)





Coffee in East Africa



Regional distribution of coffee production in East Africa (Source: Asoko Insight, ITC Trade Map, 2018).

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• Smallholder farmers produce about 60% of the world's coffee.

- Six East African countries concentrated:
- 63% of the world's coffee farmers living in poverty, and
- 71% living in extreme poverty.



Coffee in East Africa

Main issues and challenges:

- Low coffee yields
- Low income and cash flow problems
- Lack of farm inputs or inappropriate use
- Poor market access to farm products
- Inadequate infrastructure (old technologies and equipment)
- GHG emissions (waste water and pulp)
- Climate change effects
- Inadequate knowledge in good agricultural practices
- Lack of traceability for consumers and channels to create relationships between consumer-farmer

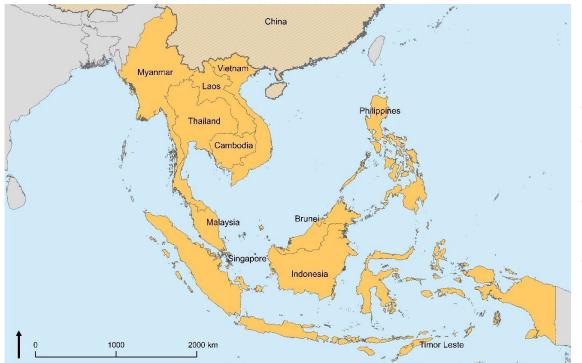
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Photo by Og Mpango from Pexels

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Rice in Southeast Asia



H. Wehmeyer, own visualization

- Rice is main staple crop
- Smallholder farmers are the main producers of rice
- Region important for global food security
- Productivity discrepancies between and within countries





Rice in Southeast Asia

Main issues and challenges:

- Yield gaps and low agricultural efficiency → Livelihoods stagnating, rural development dampened, poverty alleviation limited
- Small landholdings and limited land rights → Lack of development opportunities for farmers
- GHG emissions and climate change complicate rice farming
- Sea level rise and soil salinity reduce arable areas
 → Impacts on food security and migration flows
- Varying policy objectives rice self-sufficiency through set production targets and price fixations vs free market and competition in markets (importexport)



Rice farming (https://www.irri.org/our-impact).





Legal compliance at social, environmental, and commercial levels – minimum requirements.

Good faith efforts to develop and implement due diligence checks. Establish safe livelihoods for producers (women are a major work force for coffee production)

Improve producers living income

Rural extension services and training opportunities in green agriculture ***

Improve the use of technology (economically beneficial, simple and easy to use, combined with good extension services) Behavior change promotion (needed to improve the use of

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technology; good practice examples)



Producer

Processor

Collaboration with civil society, NGOs, academia and strategic partners – access to tools, technical expertise and operational support.

Environmentally friendly products with verifiable socio-environmental safeguards.

Government policies and promotion of extension services and green farming

Better access to insurance for coffee

Processor

Producer

More opportunities for credit access - multi-stakeholder groups and platforms operating in a pre-competitive fashion, provide synergies and increase access to financial instruments associated with environmental best practices.

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Waste recycling/ reusing ***

Processor Coffee husk use for fuel (biomass energy), bricks and mattress production.

Rice straw management

Improve coffee wastewater treatment

Improve dust management for coffee and rice processing Clean energy source (replace diesel machines for biomass energy) Old machinery replacement (water usage and emissions reduction)

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Roaster / Miller



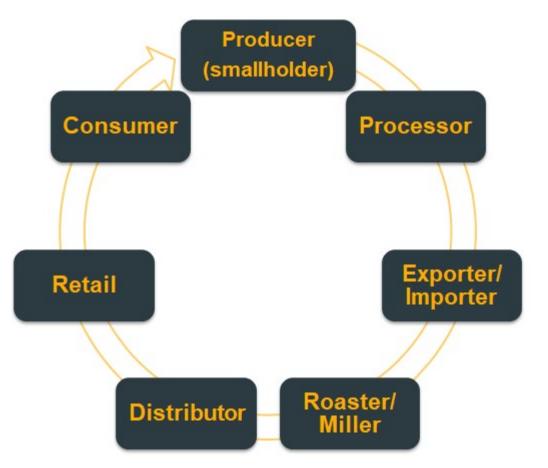


Promote local consumption (coffee in East Africa) Local supply chain*** Value addition (for coffee / cash crop): value-adding stories, personal elements regarding the production to enhance local consumption Supply chain governance – green/habitat loss-free commodities. Targeted marketing campaign for product positioning. Educating end consumers about socio-environmental traits and benefits.





Call to action







Call to action

Coffee:

- Prioritize the purchase of local products.
- Check for certification labels on the packaging.



Rice

- Check origin and production information on packaging to support sustainable rice production.
- Try wild rice varieties and less processed rice (red, brown, black) to improve nutritional value and boost production of more rice varieties.



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