

Production of non-food, bio-oil supply chains for renewable energy in Ghana: Needs, Challenges and Opportunities

Topic: "Capacity needs assessment in the biofuel sector in West Africa"

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Outline

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1. Capacity explained
2. Rational for the Subregion's interest in biofuels
3. Challenges with Biofuel devt in West Africa
4. What capacities have to be developed
5. Conclusion

What is capacity?

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- **Capacity** is defined as “the ability of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner” (UNDP, 2007).
- **Capacity assessment** is defined as “an analysis of current capacities against desired future capacities, which generates an understanding of capacity assets and needs, which in turn leads to the formulation of capacity development strategies” (UNDP, 2007).

Rational for the Subregion's interest in biofuels

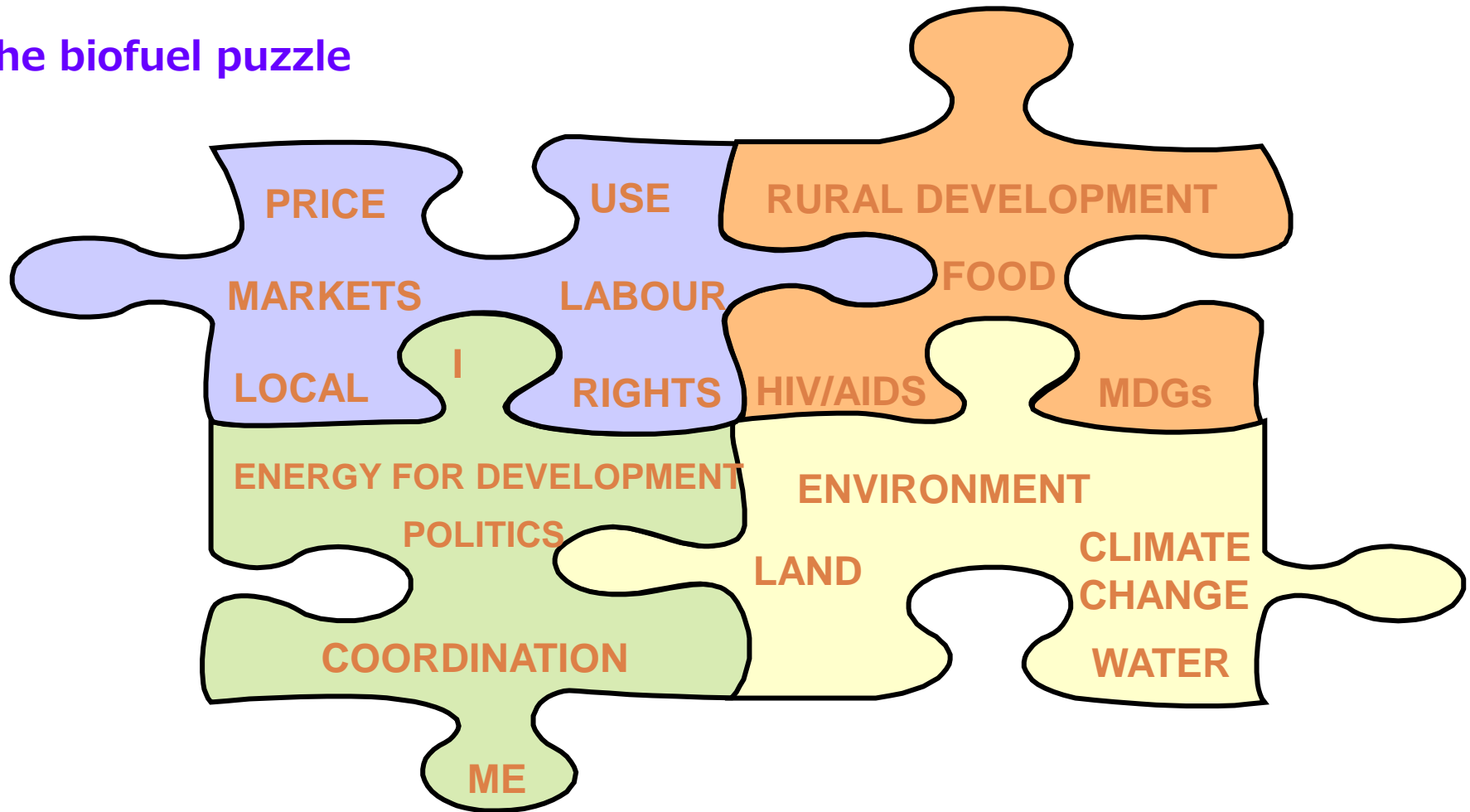
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- Import substitution to Save foreign exchange on petroleum imports
- Energy security – potential to provide cheaper local alternative petroleum fuel
- Global warming & Climate change impacts
- Income generation and poverty reduction - potential for large scale production to create jobs
- Potential to optimise production -local skills for feedstock cultivation and processing is traditionally known
- Put large uncultivated land including degraded lands to productive use to increase biofuel feedstock and food production

Challenges with Biofuel devt in West Africa

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The biofuel puzzle



Credit: Lameck Mwewa

Challenges with Biofuel devt in West Africa (Cont.)

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- Lack of funding /financing especially “patient capital”
- Inadequate local participation - limited direct involvement of local personnel to encourage “ownership” of the sector
- Limited market (opportunities) and incentives
- Inadequate biofuel centred policies and strategies with clear targets and quota for biofuel development
- Inadequate Legal, regulatory and institution framework – to ensure compliance and coordination (sector leadership) of the sector

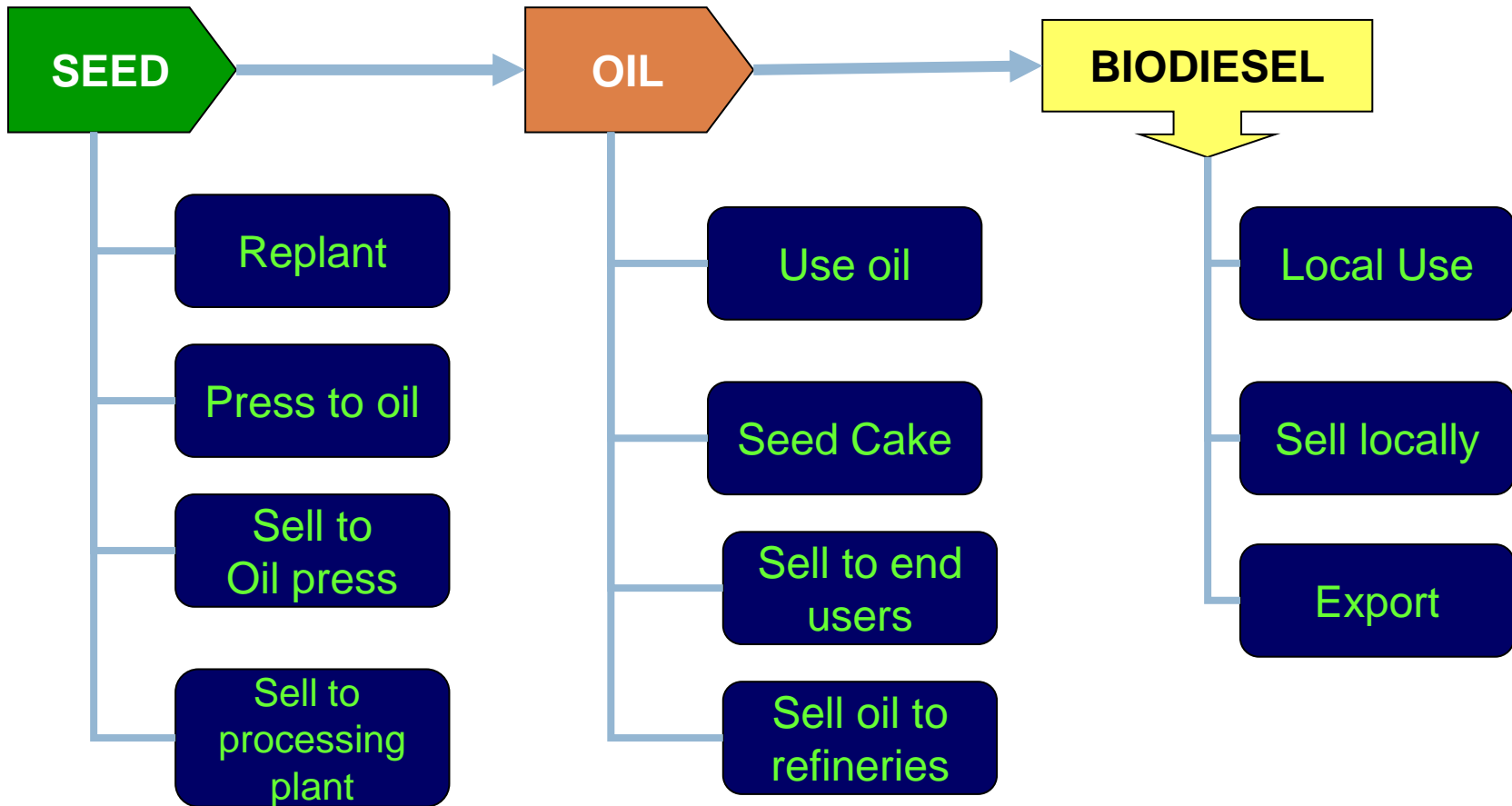
Challenges with Biofuel devt in West Africa (Cont.)

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- Absence of an appropriate production scheme and marketing/distribution infrastructure for development of a sustainable biofuel supply chain in member states
- Absence of appropriate business models for commercialization biofuels in W/Africa
- Inadequate innovation, research and development in the sub region – limited consultations and coordination with scientists, economists, engineers, and political authorities
- High promises – over exaggeration and misinformation on opportunities in the biofuel sector

The supply chain & capacity needs in W/A

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What capacities have to be developed

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Functional areas	Needs
Capacity enhancement needs for the private sector in W/Africa	<ul style="list-style-type: none">▪ Funding for research and development in public and private research institutions▪ Fostering effective PPPs▪ Appropriate production schemes and business models▪ Biofuel investment project evaluation and appraisal -financial service providers▪ Bankable biofuel business plans

What capacities have to be developed

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Capacity	Needs
Capacity enhancement needs for the public sector in Africa	<ul style="list-style-type: none">▪ Policy, regulatory and institutional framework▪ Research and development- South, south cooperation for technology transfer and skill training▪ Development of financing options▪ Market stimulation – addressing critical issues such as promoting and sustaining local demand for biofuels▪ Sustainable market development models▪ Institutional leadership for coordination and compliance – cross cutting action on biofuel development in W/A▪ Awareness creation on potentials in the biofuel sector

What capacity enhancement mechanism can be used in the industry

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- Technical support for the development of appropriate legal and institutional framework for countries in the subregion
- Support for the development of financing options and attracting foreign investment into the sector
- Practical training
- South-South cooperation for technology transfer
- Twinning and counter-parting
- Joint R&D with Europe

KSF for devt. of sustainable biofuel sector

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- Appropriate policies and regulations
- Appropriate models based on local knowledge
- Appropriate technology for primary & secondary beneficiation
- Deliberate markets & distribution infrastructure
- Sustainability criteria and standards
- Continuous capacity building & awareness
- Continuous research & development

Conclusion

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Can capacity enhancement help address the identified challenges? **YES!**

If both public and private sector capacities are enhanced,

- Biofuel industry in West Africa can be developed sustainably to:
 - Contribute to increased food production
 - Create worth and alleviate poverty
 - Contribute to increasing access to energy services in Ghana

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Thank you