



RAEIN-Africa
REGIONAL
AGRICULTURAL AND ENVIRONMENT
LIAISON NETWORK

TOWARDS DEVELOPMENT OF A SOCIO-ECONOMIC IMPACT ASSESSMENT GUIDELINE OF LMOs: RAEIN-AFRICAN EXPERIENCE

**RAEIN-Africa Secretariat
Presented by:
Dorothy K. Mulenga, PhD**

Capacity Building Workshop on SEI of LMOs New Delhi 14-16 Nov. 2011

1

OUTLINE OF PRESENTATION

- About RAEIN-Africa
- Provisions for SEC in NBFs in SADC
- Gaps identified
- RAEIN -Africa Road Map unpacking SEC & Dev. Of Guideline
- Socio-economic Impact Guideline
- Lessons from Developing SEIA Guidelines

www.racin-africa.org

Capacity Building Workshop on SEI of LMOs
New Delhi 14-16 Nov. 2011

2

ABOUT RAEIN-AFRICA

- Regional Agricultural and Environmental Initiatives Network-Africa (RAEIN-Africa) operates in SADC member countries.
- RAEIN-Africa uses the innovation systems approach to facilitate and promote interfacing of science, technology, and society for sustainable livelihoods.
- Focuses on creation of an environment that promotes innovation through
 - Capacity building
 - Knowledge generation, and
 - Currently studying cases on innovation around biotechnology and biosafety

www.racin-africa.org

Capacity Building Workshop on SEI of LMOs
New Delhi 14-16 Nov 2011

3

PROVISIONS FOR SOCIO-ECONOMIC CONSIDERATIONS IN NBFS IN SADC

- SADC countries have provided for scientific risk assessment and in addition most have provided for socio-economic consideration in their NBFs:

• “Apart from **scientific risk assessment report** public contribution and other **socio economic considerations** have to be carried out.”

• “**A study of ethical and socio economic impacts on local population** must be done first. Effects on: traditional markets and exports, systems of production (food security), socio ethic and moral issues, effects on economic value of traditional species and **effects on health of the communities**”

www.racin-africa.org

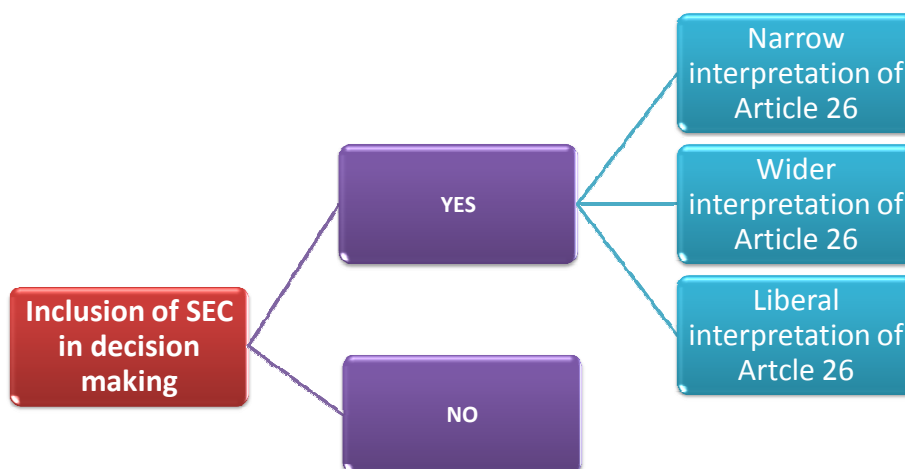
Capacity Building Workshop on SEI of LMOs
New Delhi 14-16 Nov 2011

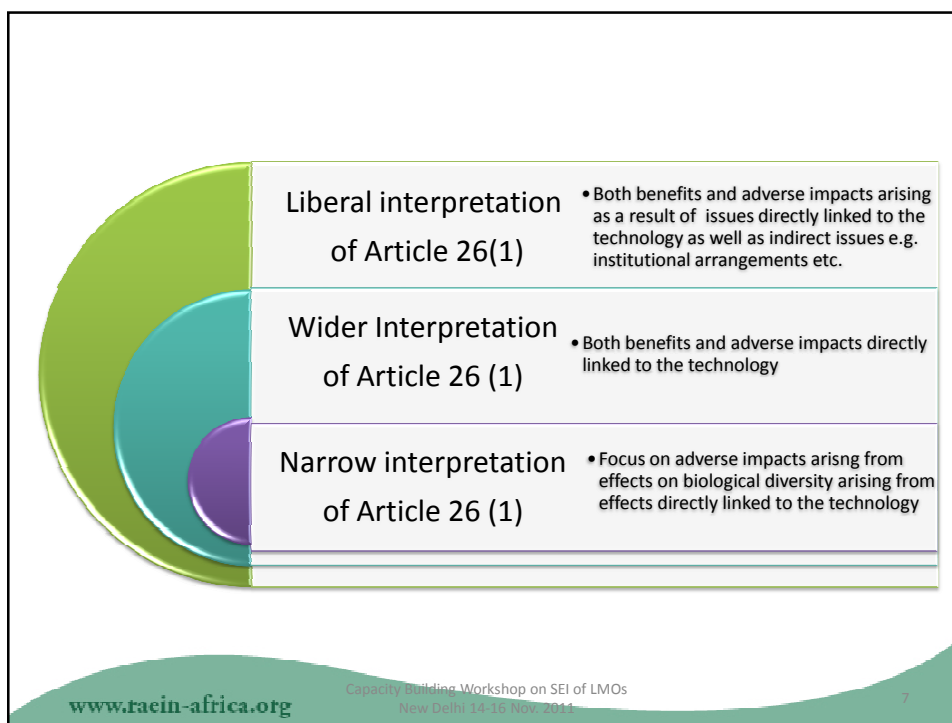
4

PROVISIONS on SEC in NBFs (contd.)

- “The Council **may** in performing its function in terms of sub regulation (8), **consider the socio-economic impact** that the introduction of a genetically modified organism may have on a community living in the vicinity of such introduction.”
- “A positive decision based on scientific risk assessments can be overturned on the basis of negative socio-economic risks, whilst a negative decision based on scientific risk assessment cannot be overturned on the basis of socio-economic reasons”

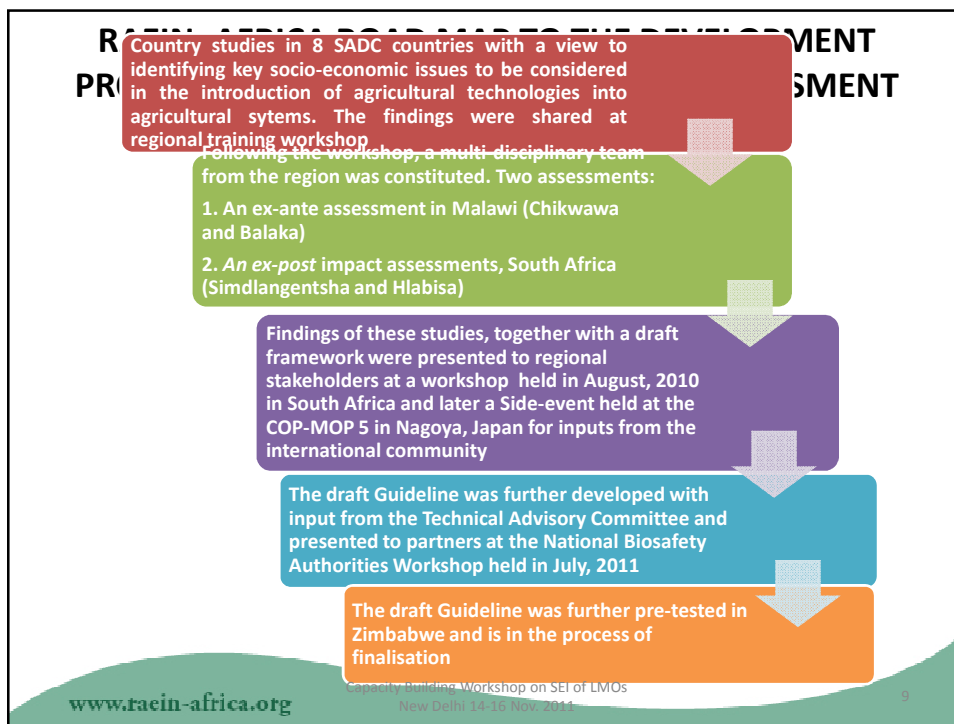
Interpretation of Article 26





GAPS IDENTIFIED

- Lack of clarity on how Article 26.1 of the CPB should be operationalised:
 - Lack of international guidelines or standards on socio-economic assessment that meet international provisions of the CPB & WTO,
 - Lack of clarity on what socio-economic issues can be considered to meet the provisions of Article 26,
 - Complexity of socio-economic issues,
 - Lack of methods and tools to assess some of the issues.



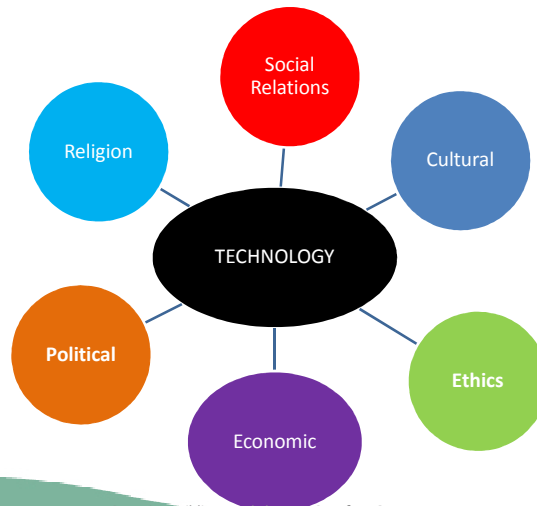
SOCIO-ECONOMIC IMPACT ASSESSMENT GUIDELINE

www.racin-africa.org

Capacity Building Workshop on SEI of LMOs
New Delhi 14-16 Nov 2011

10

Relationship Between Society and Technologies

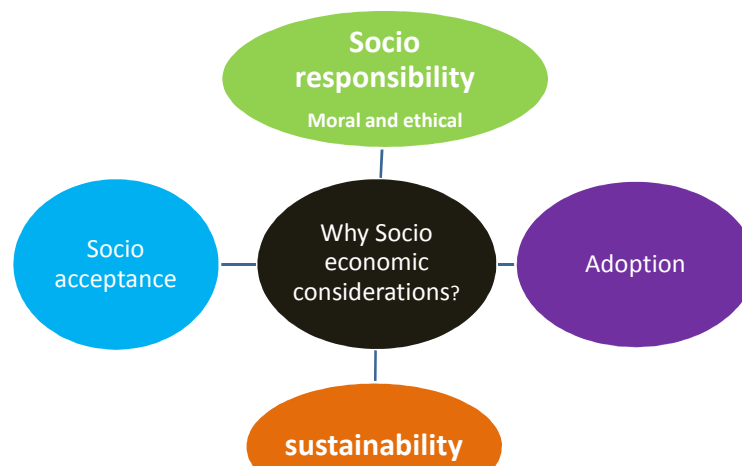


www.racin-africa.org

Capacity Building Workshop on SEI of LMOs
New Delhi 14-16 Nov 2011

11

Importance of Considering SE Impacts/Issues



www.racin-africa.org

Capacity Building Workshop on SEI of LMOs
New Delhi 14-16 Nov 2011

12

PURPOSE OF SEIA GUIDELINE

- The guideline is a tool that enables **evidence based** decision making in biosafety.
- The guideline seeks to:
 - facilitate an understanding of the processes involved in SEIA of LMOs,
 - provide practical guidance in the assessment of socio-economic impacts of LMOs.
 - provide guidance on how SEIA can be carried in accordance to a country's national biosafety regulations.

Issues to be Answered by the Assessment

- What socio-economic impacts may the modern biotechnology have?
- Is the potential impact identified beneficial or adverse?
- What prevalent social and other conditions may make the community more vulnerable?
- Which groups within the community would be most vulnerable?

Issues (contd.)

- For any adverse impacts identified, how likely is each to occur?
- If the impacts occur, what magnitude of change is it likely to cause?
 - The number of people that may be affected: Significance increases with an increase in the number of people affected.
 - Its duration: The longer the impact, the more significant it is.

Issues (contd.)

- Whether or not it would be reversible: Irreversible impacts carry more significance than reversible ones.
- How quickly the change is likely to occur- fast, intermediate or slow
- In identifying the issues above, the assessment should be:
 - Case by Case
 - Context specific
 - Location/Area specific

LESSONS FROM DEVELOPING SEIA GUIDELINE

- Low levels of awareness on LMOs and their potential benefits and impacts
- Socio-cultural practices and survival strategies that are strongly embedded in community make analysis of issues complex
- Importance of developing an “ear” to listen to what is important to the stakeholders (e.g. consumers and farmers, policy makers and industry) vs what one perceives to be important

LESSONS (contd.)

- Reliability of data/ information
- The broad interpretation by NBFs in the region Vs the interpretation of Article 26(1) as per the Protocol makes it difficult to marry the two through a guideline:
 - *How far should the guideline go so as to ensure that Nations meet the CPB provisions or extend the guideline to include the nationals' interpretation which is wider than the really provisions of the CPB*

LESSONS (contd.)

- Variation in terms of how countries intend to implement article 26: *“whether parallel to the scientific risk assessment, prior to the scientific risk assessment or even posts the scientific risk assessment”*.
- Who bears the cost of this assessment?
- Limited social scientists in country to carry out such studies - more inclination goes towards carrying out economic impact assessment rather than both?

LESSONS (contd.)

- Getting information together and getting it to make sense for an SE evaluation is a challenge.
- Need for capacity building on the SEIA

RAEIN-AFRICA SECRETARIAT
P.O.Box 23544, Windhoek, Namibia
Tel/Fax: +264 61 2063350
E-Mail: raein@mweb.com.na
dmnyulwa@unam.na
dmulenga@unam.na
Website: www.raein-africa.org

www.raein-africa.org

Capacity Building Workshop on SEI of LMOs
New Delhi 14-16 Nov 2011

21

ACKNOWLEDGEMENT

- RAEIN-Africa is grateful to the Ministry of Foreign Affairs in the Netherlands (DGIS) for the funding to the ISP-TEESA programme that made this work possible.

www.raein-africa.org

Capacity Building Workshop on SEI of LMOs
New Delhi 14-16 Nov 2011

22

- RAEIN-Africa Secretariat would like to extend gratitude to the following partners who worked on this process:
 - Mr Marnus Gouse, University of Pretoria, South Africa
 - Dr Eroid Naomab, University of Namibia, Namibia
 - Dr Margaret Sikwese, University of Malawi, Malawi

- Abisai Mafa, National Biotechnology Authority, Zimbabwe
- Mrs Patricia Rwasoka-Masanganise, African Institute for Community Development Driven Development, South Africa
- Jose Falck-Zepeda, IFPRI/PBS, USA
- Dr Emmarold Mneney, Agricultural Research Institute, Mikocheni, Tanzania
- Dr Phumzile Dlamini, RAEIN-Africa TAC, South Africa



RAEIN-Africa
REGIONAL
AGRICULTURAL AND ENVIRONMENT
INTEGRATIVE NETWORK

Thank you

Capacity Building Workshop on SEI of LMOs New Delhi 14-16 Nov. 2011

25