Agriculture Working Group

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Challenges (1)

- Lack of diagnosis especially at the farm gate
- Lack of equipment and materials for diagnosis
- Lack of awareness
- Inadequate communication between ag, health and trade,
- Infrastructure - lack of electricity
- Inability to source good quality raw materials at right price
- Absence of risk mitigation mechanisms (farm insurance)
- Lack of accessible control options
  - Lack of storage
  - Need for drying
  - Lack of biocontrol
- Investment value proposition is not clear (Farmers not convinced they will get a premium, so unwilling to pay control measures)
Challenges (2) ???

* Lack of capacity
* Lack of regulatory frameworks in West African States
* Lack of enforcement systems
* Lack of discrimination in the market place
* Lack of mechanism to channel contaminated material to other uses
* Inadequate communication between institutions working on the problem
  * Inadequate communication on control technologies available
* Engaging policy makers in the issue
* Climatic conditions in West Africa support aflatoxin growth
* Poor extension and lack of communication between researchers and farmers
* Complex nature of the problem (multi-sectoral, multi-level)
* Need for risk mapping (lack of information on aflatoxin prone areas)
Opportunities (1)

* Tools are available for aflatoxin management in maize and groundnuts (Scaling up aflasafe, dryers and storage facilities, etc.)
* Increased awareness and interest in the topic of aflatoxin among AU, Scientific community, private sector, and others (among private sector, increased interest in supporting research/testing)
* Existing initiatives in the region
* Existing frameworks (CAADP, ECOWAS agric plan) - to engage all countries in the region
* Opportunity to put together a coherent, cohesive, comprehensive plan
* Regional leadership (ECOWAS, CORAF, FARA, CILLS)
* Markets are beginning to discriminate, which encourages farmers to address aflatoxin
Opportunities (2)

* Pilots
* Farmer groups
* Increasing political will to increase regional trade by reducing non-tarriff trade barriers, such as food safety
* Poultry sector is facing profitability challenges due to price of feed; aflatoxin control can help address this
* Critical mass of people on the ground willing to work on aflatoxin
* Pockets of excellence in the region that can be linked and leveraged (e.g. accredited laboratories in the region)
* Students willing to carry out research on aflatoxin to aid farmers
* Multi-sectoral impacts creates opportunity for a multi-sectoral awareness campaign
* 2014 AU Year of Agriculture
* Awareness should be on food safety more broadly, with aflatoxin as one piece to catch awareness
Priority Solutions

Education and Awareness, Capacity Building
* Farmer training
* Connect farmers with researchers
* PACA and ECOWAS should mobilize funds

Pre-Harvest
* Aflatoxin-resistant seeds
* Biocontrol - conduct trials to demonstrate product value
* Good agricultural practices - look at critical control points for all crops of concern

Research/Diagnosis
* More research in cultural control mechanisms

Post Harvest
* Decontamination and alternative uses
* Cutting edge laboratories for screening
* Grain drying and storage
Solutions in Related Sectors

Markets
* Incentives for farmers to adopt aflatoxin control

Policy and Regulation
* Each country develop a mycotoxin policy
* Strengthen regulatory agencies
Priority solutions in ECOWAS countries
1. Farmers training

What could be done?
Organize workshops, farmer field schools, demonstration plots, field days, exchange visits

Who could be involved?
Extension agents, researchers (IITA, ICRISAT, BecA, country NARS, universities), private sector service providers, NGOs

How could it be done?
Prepare training materials, videos, Train-the-trainer workshops
2. Connect farmers with researchers

What could be done?
Connect farmers with researchers

Who could be involved?
Extension agents, private sector, NGOs

How will it be done?
Workshops, field schools, personal contact, disseminate information and mechanism for follow up
3. Mobilize funds

What will be done?
Mobilize funds

Who could be involved?
PACA, ECOWAS

How could it be done?
Strategic plan and proposals for donors
4. Aflatoxin-resistant seeds

What could be done?
- Multiply and distribute existing, high yielding, farmer preferred lines where available (groundnuts)
- Multi-locational trials for lines for which this has not already been done

Who could be involved?
ICRISAT, NARS/universities

How could it be accomplished?
Multiply and distribute existing, high yielding, farmer preferred lines where available (groundnuts)
5. Biocontrol

What could be done?
Scale up biocontrol

Who could be involved?
Research institutions (IITA, ICRISAT, BecA,…) NARS/universities, NGOs, farmers collaborators

How could it be accomplished?
Train farmers how to use the technology, assess level of control and collate data
6. Good agricultural practices - look at critical control points for staple crops

What could be done?
Document, train, include GAP in extension agent materials and use in farmers training programs

Who could be involved?
Extension workers, farmers, NGOs, private sector, researchers

How could it be done?
Demonstrations, develop manuals, identify lead farmers who receive training and pass it on to neighbors
7. Research on indigenous practices

What could be done?
More research in cultural (indigenous) control mechanisms

Who could be involved?
Researchers, farmers, extension agents

How could it be done?
Field trials, on farm trials
8. Decontamination and alternative uses

What could be done?
- Grade raw material. Use maize with levels less than 100ppb for livestock feed, higher levels can go to other species, ammoniated product can be used for fertilizer
- Use as a biofuel

Who could be involved?
Regulators, diagnostic laboratories, farmers, industry

How could it be done?
Innovation platforms, develop universally accepted grading system
9. Laboratories for screening

What could be done?
Build capacity of labs to conduct screenings and cutting edge monitoring

Who could be involved?
National labs, private labs, research institution labs, institutional labs

How could it be done?
Research sponsorships
10. Grain drying and storage

What could be done?
- Identify good drying and storage facilities.
- Locate new drying and storage facilities close to farmers.
- Ensure power supply is available.
- Maintain dryers and storage facilities.
- Train farmers on how to dry.

Who could be involved?
Farmers, researchers, extension agents, private sector

How could it be done?
- Identify existing facilities and construct drying and storage facilities where they are not available.
- Provide adequate security.
11. Incentives

What could be done?
- Incentives for farmers to adopt aflatoxin control
- Reward farmers who produce clean produce

Who could be involved?
Farmers organisations, private sector

How could it be done?
- Organise and train farmers into cooperatives,
- Run trials with private sector poultry houses that demonstrate the aflatoxin problem and the effectiveness of proposed control method
- Create markets to provide incentives. Market needs to differentiate different grades. Need premium for aflatoxin-free.
Branding
12. Review policy

What could be done?
Review or develop food safety policy and make it mycotoxin-specific.
Where there is not already a food safety policy, develop a mycotoxin policy.

Who?
Scientists, NGOs, governmental agencies (Bureaus of Standards, Health Ministry, Trade Ministry, Ag Ministry, regulators), Parliament.

How?
Convene stakeholders.
13. Strengthen regulatory agencies

What?
Build capacity for risk analysis in regulatory agencies

Who?
Regulatory agencies, policy makers, researchers

How?
Furnish regulatory agencies with the necessary tools and resources
Develop special capacity building packages
- Risk assessment - Develop risk based measures based on risk assessments
- Risk communication - Communicate risks
- Risk management - Enforce risk based measures through training, and legal means if necessary
Mainstreaming

Frameworks
Sensitization through education

Country level
Nigeria
- NAFDAC
- SON (Standard Organization of Nigeria)

Regional level
PACA, ECOWAS, etc...

Process
Strong advocacy and linkage with policy makers