

EAST-WEST SEED  
INTERNATIONAL



# Agricultural training and education in Cambodia

Symposium on Agricultural Training and Education in Developing Countries

Fairfax, Virginia, USA  
18-20, September 2013

# Outline of presentation

- Background info on Cambodia – setting the context
- The state of Agricultural education in Cambodia
- Linking to the industry
- Training farmers through market driven extension
- Linking industry to Universities an example from Myanmar
- Conclusion
- References

- As a result of economic difficulties, corruption, and the increasing threat of communism, Cambodia entered into a period of political instability in late 1960s
- In 1975 the country was pushed into an even darker period when the Khmer Rouge initiated a radical agrarian revolution
- During this time millions died, social capital was destroyed
- Security was finally restored in 1998
- However, the country faced dire social and economic problems and was left with a dysfunctional education system

# The agricultural sector

- Population 14.7m
- 30% live beneath national poverty line
- 77% live in rural areas (World Bank)
- Agricultural development critical as an engine for economic growth
- However, the adoption of improved agricultural technologies and cropping techniques has remained disappointingly slow
- With a large part of poverty reduction attributed to technological innovation there is an urgent need to revive agricultural education and advisory services

# Agriculture as an engine of growth?

- For a country where 85 per cent of the population depend on agriculture for their livelihoods (ADB and IFAD), the development of the sector remains a priority to reduce poverty in Cambodia
- However, is enough being done?
- Too few young people being trained in agriculture
- Agriculture is poorly represented in higher education
  - Only 4% of undergraduates
  - Only 1% of postgraduates (MSc)
  - Only 7.9% of Ph.D's

} Studies in agriculture

# Too little focus on agricultural education



**From 101 universities, only 8 specialize in agriculture**

<b>Royal University of Agriculture</b>	<b>Phnom Penh</b>	<b>BSc</b> <b>MSc</b> <b>PhD</b>
<b>Prek Leap National School of Agriculture</b>	<b>Phnom Penh</b>	<b>Associate degree</b> <b>BSc</b>
<b>Chea Sim University of Kamchay Mear</b>	<b>Prey Veng Province</b>	<b>BSc</b> <b>MSc</b>
<b>Kampong Cham National School of Agriculture</b>	<b>Kampong Cham</b>	<b>Associate degree</b> <b>BSc</b>
<b>Svay Rieng University</b>	<b>Svay Rieng</b>	<b>BSc</b>
<b>Meanchey University</b>	<b>Banteay Meanchey</b>	<b>Associate degree</b> <b>BSc</b> <b>MSc</b>
<b>University of Battambang</b>	<b>Battambang</b>	<b>BSc</b>
<b>University of Management and Economics</b>	<b>Battambang</b>	<b>BSc</b>

# Familiar constraints....

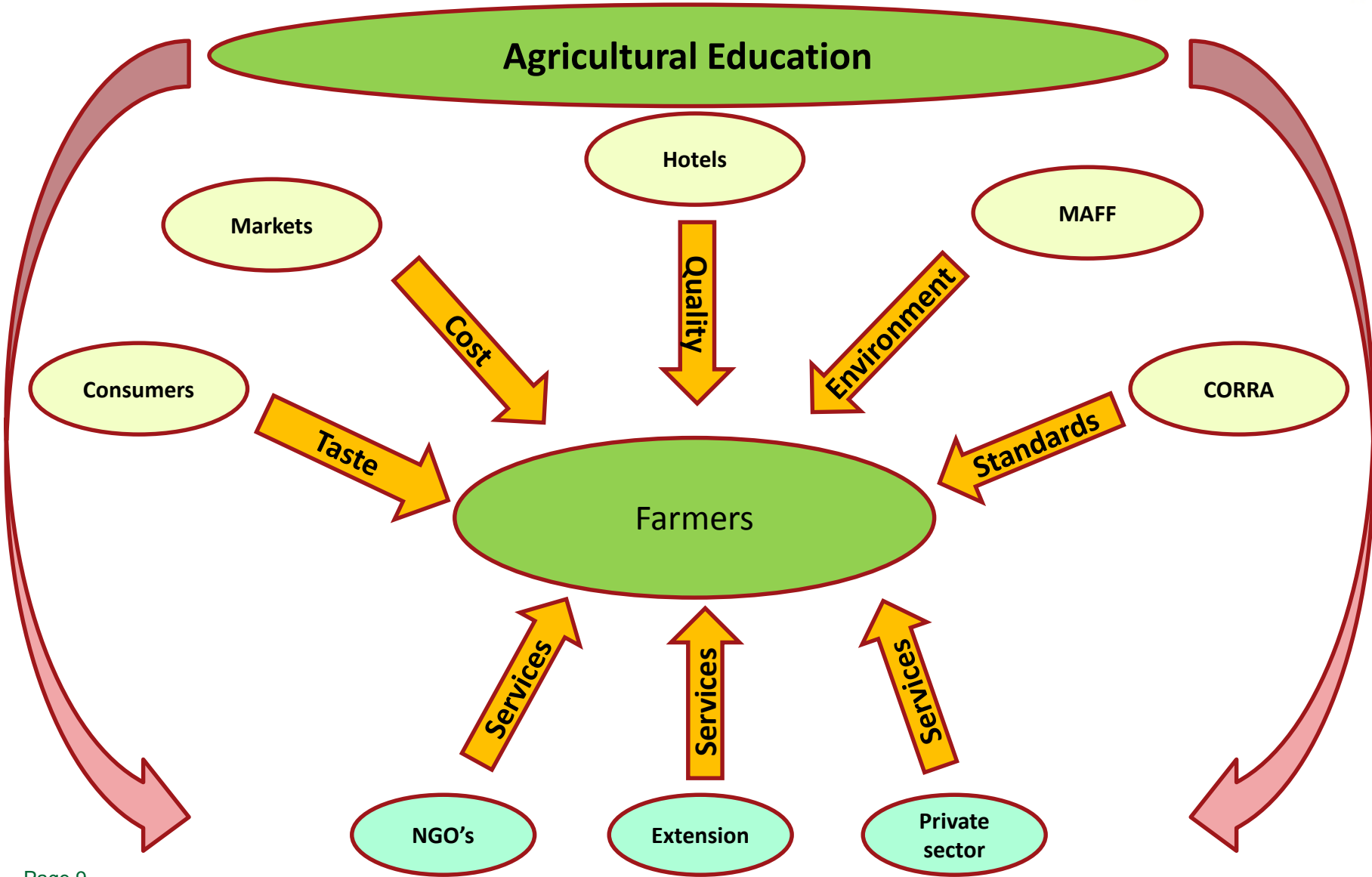
- Lack of lecturers
- Limited knowledge and skills amongst staff
- Late and low payments force alternative sources of income
- Poorly equipped laboratories with limited operational expertise
- Limited access to land for student practical
- Few resources and lack of research and reference material
- Limited internet connectivity
- Insufficient budget
- Unofficial fee's

# The need to link to the industry

- ✓ As most farmers rely on one-another for advice, introducing appropriate knowledge through extension is critical to develop agricultural sector
- ✓ Extension services through public and private sector as well as NGOs
- ✓ The lack of skilled personnel to transfer knowledge is a major barrier
- ✓ With markets being the primary driver for agricultural development, education must embrace links to the industry
- ✓ Improved linkages enable the development of dynamic curriculums and bridge the gap between education and realities of the market

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# Using market signals to align education to demand



# Why is East-West Seed involved in education and training?



- ✓ Poor small-scale farmers are the main producers in developing economies
- ✓ Lack of knowledge in the benefits of using improved varieties and better cultivation techniques is a major hindrance to their adoption
- ✓ Long term business strategy
- ✓ Lays down the foundations needed to develop sustainable market in quality agricultural inputs



# Promoting good practices through peers

- ✓ New techniques built up from existing practices
- ✓ Demonstrations:
  - ❖ Showcase profitable techniques
  - ❖ Reduce high aversion to risk
  - ❖ Change perceptions on cultivation practices
- ✓ Key farmers remain innovative and sustainable resources of good practices
- ✓ Key farmers assure the continued promotion of varieties as well as better techniques



# Transfer of knowledge through field days

- ✓ Dissemination of technical and financial results
- ✓ Experience of peers improves receptiveness to change
- ✓ Analysis of cost and return improves understanding of the benefits of adopting new varieties and technologies
- ✓ Comparison of varieties enables more objective decision making



# Working with collectors to create market-pull

- ✓ Using business incentive of collectors to increase productivity and improve qualities
- ✓ Collectors promote varieties and techniques better adapted to match market demands
- ✓ Improved trust reduces transaction costs and enables long term trading arrangements
- ✓ Collectors increasingly offer improved services (loans and advice) in order to secure reliable supplies



# Example of results in Siem Reap

- ✓ Three years with two staff had a direct outreach to 5,500 farmers in one province alone
- ✓ More than 80% of these *doubled* their income, with widespread replication continues
- ✓ Market transformed from 100% local seed (2008) to 75% improved seed (2012)
- ✓ Market opportunities created attracted competition from other companies

**But this can only work with skilled staff!!!**



# Links to develop skilled personnel

- ✓ Develop programs to assure graduates are aligned to industry needs  
ie scholarships and internships
- ✓ To be a reliable source of up to date information on the sector
- ✓ To act as a trusted partner to foster public private partnerships
- ✓ Share expertise with sector
- ✓ Develop complimentary and market driven outreach program which could benefit students and farmers

# A model of change in Myanmar

To support the development of market focused human resources in Myanmar, East-West Seed cooperates with Yezin Agricultural University:

- ✓ Scholarship Program
- ✓ Internship program
- ✓ Technology demonstrations/trials



# Win-win with scholarships



- ✓ Support MSc research projects with funding, advice and information
- ✓ Reducing students financial constraints enables them to undertake activities which would have previously been unfeasible
- ✓ Students gain practical insight into needs of the industry
- ✓ Ongoing projects:
  - ❖ Value chain analysis of vegetable sector in Mon State
  - ❖ Constraints for onion producers in dry zone
- ✓ Adds value and significance to students work.

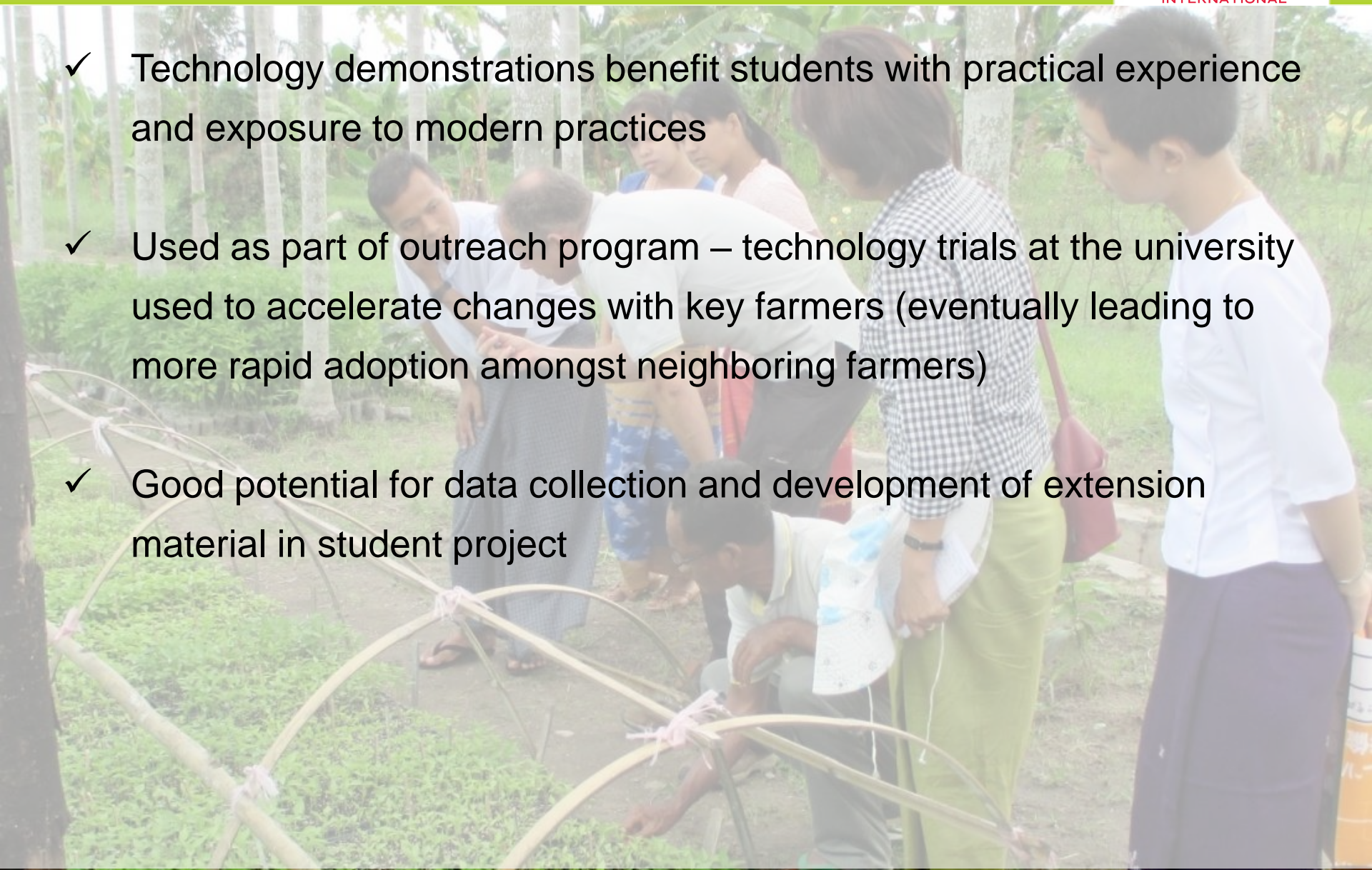
# Experience through internship and work practice



- ✓ Internships enable undergraduate and postgraduate students the opportunity of experiencing how companies operate
- ✓ Students empowered through more informed decisions on career path
- ✓ Opportunity for company to assess individuals as potential future recruits
- ✓ Current proposals for pilot project 2013/14:
  - ❖ 3 MSc students to be supported with international placements focusing on extension, seed production and marketing.
  - ❖ BSc students to be placed locally with extension and guided through value chain analysis

# Supporting university outreach program

- ✓ Technology demonstrations benefit students with practical experience and exposure to modern practices
- ✓ Used as part of outreach program – technology trials at the university used to accelerate changes with key farmers (eventually leading to more rapid adoption amongst neighboring farmers)
- ✓ Good potential for data collection and development of extension material in student project



# What do we want?!

- ✓ Opportunity for company to assess potential recruits and student to make more informed career decisions
- ✓ Students supported more likely to seek employment within the company
- ✓ Students not employed by the company will use skills within sector
- ✓ Investment justified through long term effects to sector which create enabling environment for growth of company



# Conclusion

- ✓ Effectiveness of field level training is dependent on quality of university education
- ✓ Linkages between industry and education critical for development of demand driven sector
- ✓ Role of university can be broader than standard curriculum



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