

“Mapping and Assessing University-based Farmer Extension Services in ASEAN through an Agro-ecological/Organic Lens”

REGIONAL SYMPOSIUM

Sustainable Agricultural Research and Extension in Cambodian Higher Education Institutions

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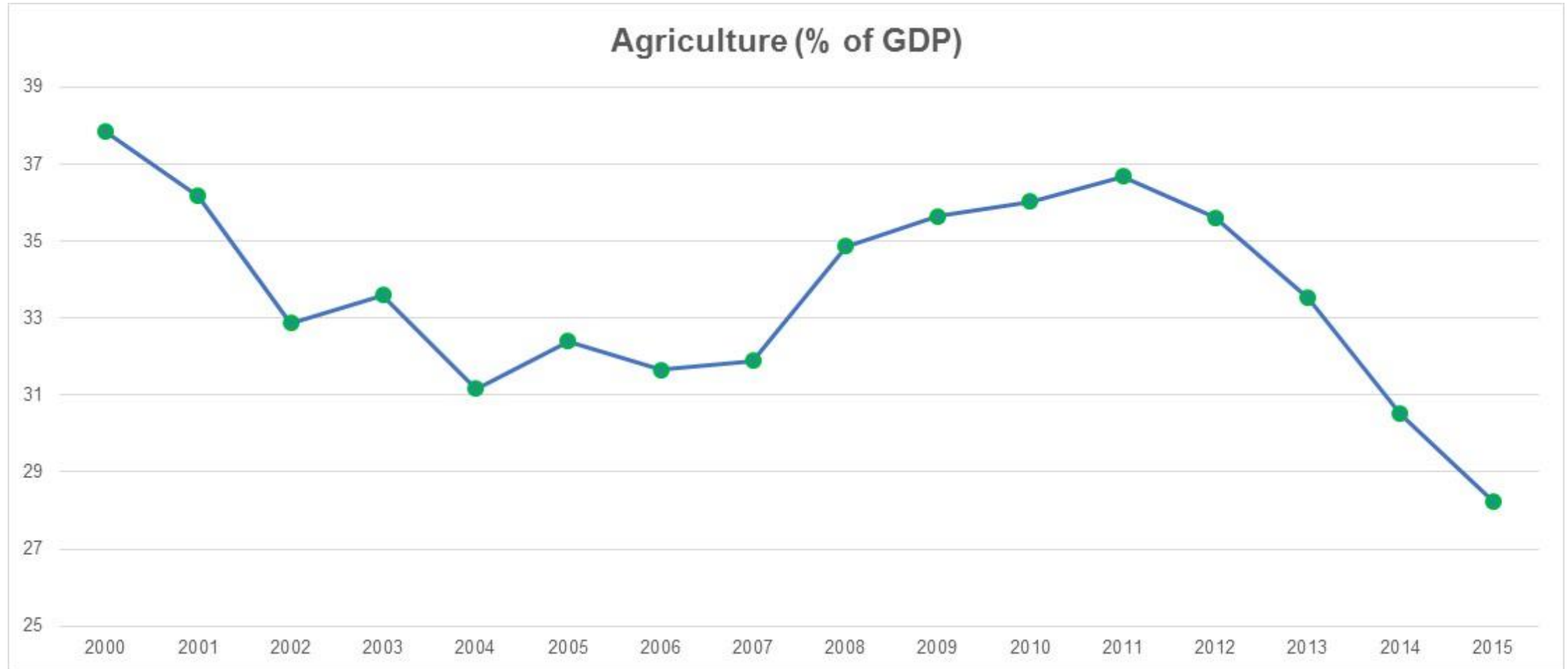
General Context

#	Description	Figures
1	Total population	15 millions
2	Estimated population of households with agricultural holdings	8.5 millions
3	Number of households listed with household agricultural holdings	2.1 millions
4	Total area of all household agricultural holdings	3.3 million ha
5	Average area for all household agricultural holdings	1.55 ha
6	Agricultural households reported the use of extension services provided by government	30%

General Context

#	Description	Figures
7	Agricultural households reported to receive agricultural information from the radio	52%
8	Agricultural households reported to have experienced food insecurity and shortages during the 12 months	16%
9	Agricultural households that experienced food insecurity and shortages caused by low crop yield	80%
10	Agricultural households reported to have resolved the problem of food shortage including the primary solution of borrowing money, securing food on credit or as advance payment for manual labor to be undertaken at the time of the next harvest of the total households experienced food insecurity	89%

General Context



General Context

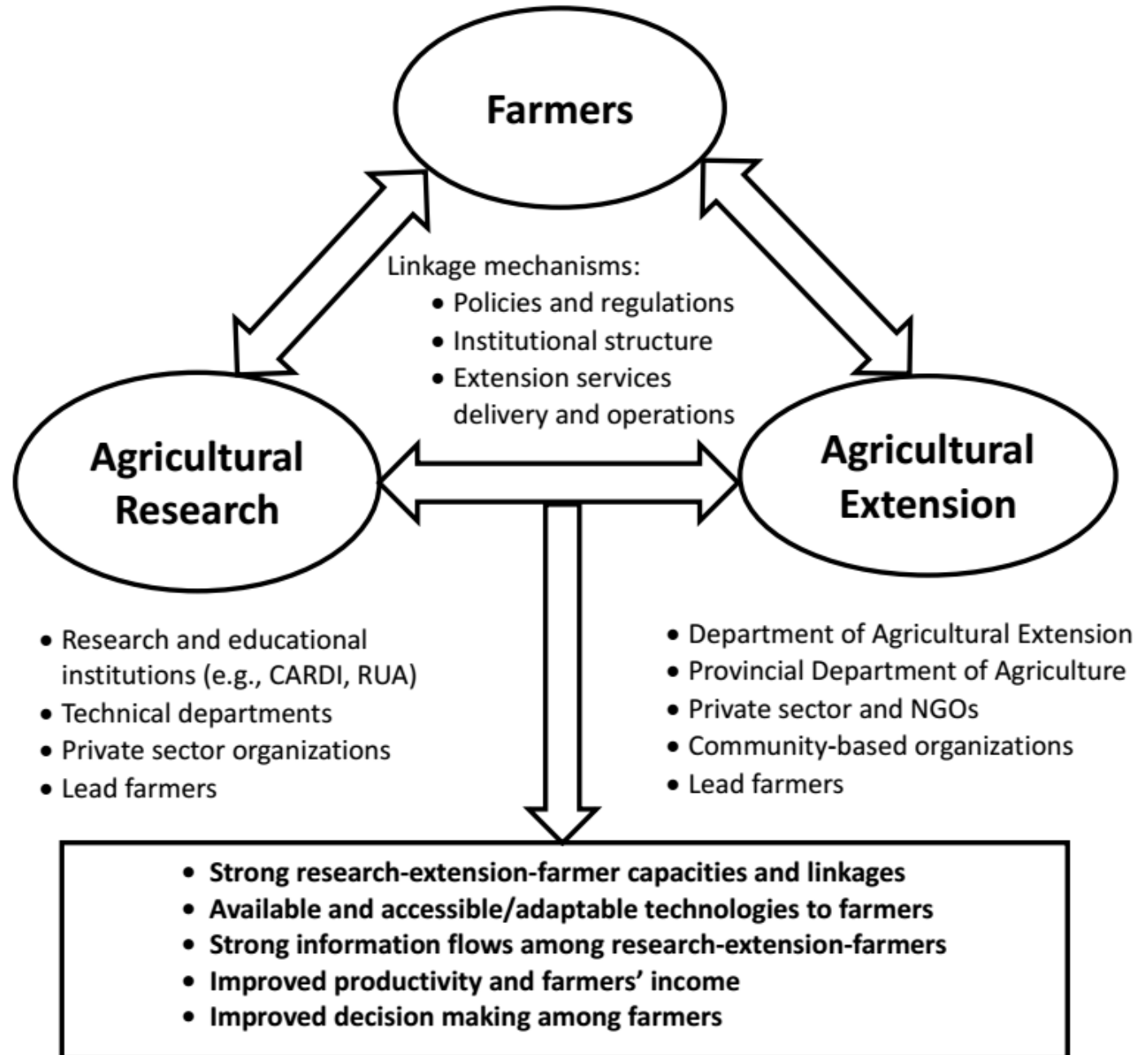
- 60 percent of the rural poverty reduction being attributable to agriculture - (5 million laborers) or **41%** of the total working forces,
- Annual growth of agriculture – 6% (2004 – 2012); **0.2 %** (2013 - 2015)
- **> US\$ 100 million** imported vegetables in 2015
- Approximately **200 tons a day** imported vegetables from Vietnam in 2014



Agricultural Research & Extension (ARE)



ARE Policy



ARE Resources

- Agricultural extension system is undermanned and underfunded.
 - Agricultural extension policy launched in May 2015
 - 4-5 extension workers per each district - about 10 communes or 1 against 3,000 households
 - Little use of ICT in extension
 - \$ 2 million per annum from 2005 to 2010 for agricultural research
- Major financial sources for extension
 - IFAD: RPRP, TSRSDP, PADEE, and ASPIRE
 - HARVEST of USAID,
 - ECOSORN of European Union,
 - NAPA of UNDP, and
 - NGOs



Extension Services Received and # of Contacts

#	Service Providers	N	%
1	Local agricultural service center	1841	22.4
2	Local village/commune office	1826	49.6
3	Agriculture colleges/universities, Cambodia	1730	3.6
4	Technical or vocational school	1729	4.9
5	Extension agents from the Ministry of Agriculture, Forestry and Fisheries	1772	24
6	Cambodian Agricultural Research and Development Institute (CARDI)	1729	6
7	NGO managed projects	1813	60.8
8	Local demonstration farms	1741	20.6
9	Local agricultural research stations	1726	4.6
10	Local fertilizer/input supply dealer	1764	16
11	Other service providers	1465	7.9

Sources of Information Used

#	Sources of information	N	Nothing at all	A little	Some	A fair amount	A great deal
1	General newspapers	3028	93	3.8	2.1	1	0.1
2	Farm magazines	3024	89	5.8	3.7	1.3	0.3
3	Extension publications	3026	80.5	7.9	7.5	3.7	0.4
4	TV farm programs	3025	56	13.4	16.4	12.6	1.7
5	Radio farm programs	3026	48.7	15.7	17.5	15.4	2.7
6	Local demonstration farms	3025	83.4	6.7	6.5	2.9	0.5
7	Web/internet/e-mail	3023	97.7	1	0.8	0.4	0.1
8	Extension meetings, workshops, courses	3026	55.6	14.1	19.2	9.9	1.1
9	Agricultural research stations	3027	93.7	3.2	2.1	0.8	0.1
10	Demonstration plots at local farmers' field, field days and tours	3025	88.7	5.5	4.3	1.3	0.2
11	Personal contact with extension agents	3025	83.9	7.7	5.7	2.3	0.4
12	Leader farmers in your area	3025	80.4	8	6.5	4.1	1
13	Neighbors/relatives	2974	45.4	17.2	14.8	19.2	3.3

Agriculture Higher Education Institutions (HEIs)



Overviews

- 121 HEIs (supervised by 16 different ministries)
- 48 of them are public HEIs,
- Politically affiliated and supervised by central government
- Limited financial allocation,
- Underlying with fraught and lack of transparency, leadership appointment and program approval,
- Large portion of financial resources spent on staff remuneration

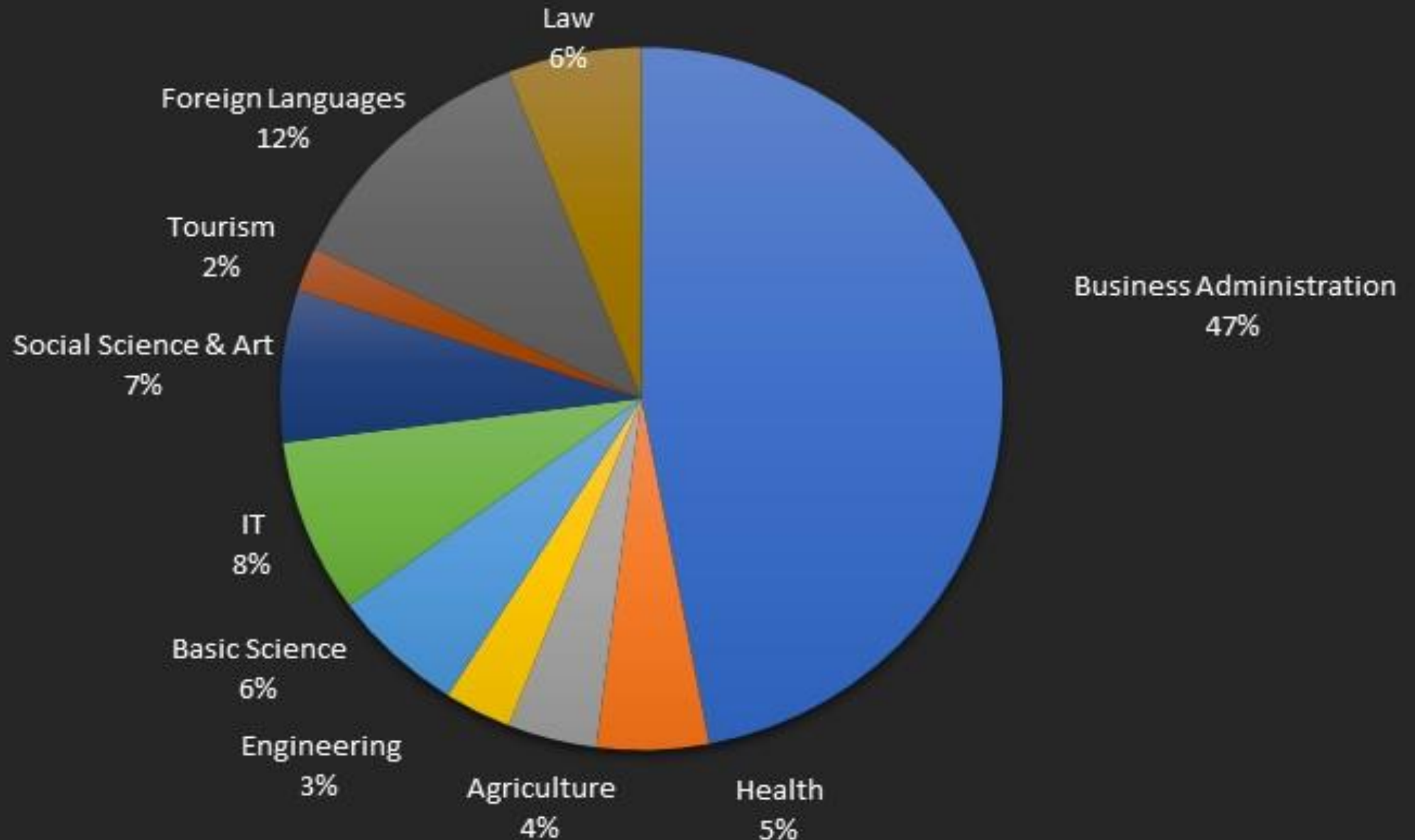
Overviews

- Research for capacity building is considered **non-significant**,
- Lecturers pay more attention on **teaching fee** and having **no-time** for research,
- The capacity development relies mainly on **international donors** - scholarship and research,
- **Failure of financial support** of the government to public universities in the field of pure science majors, and
- Academic curricula generally provided by private universities are **still in the agenda of the public institution**.

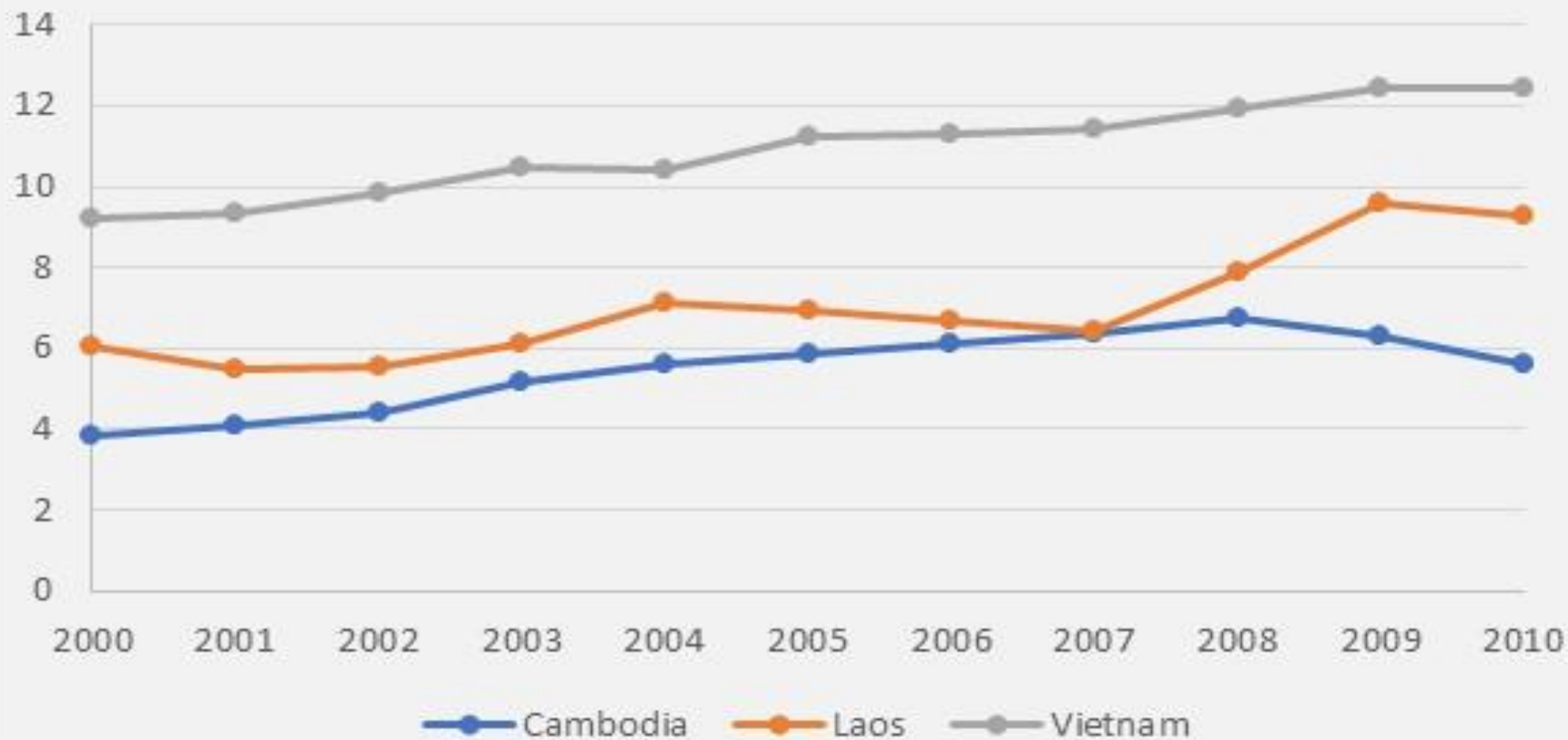
HEI in Agriculture

- 220,000 students enrolled in HEIs,
- 4% of students enrolled in agriculture related field,
- 7 Key universities in Agriculture:
 - Royal University of Agriculture, Phnom Penh (RUA),
 - Prek Leap National School of Agriculture, Phnom Penh (PLNSA),
 - Kampong Cham National School of Agriculture, Kampong Cham (KCNSA),
 - University of Battambang, Battambang (UBB),
 - Mean Chey University, Banteay Meanchey (MCU),
 - Svay Reang University, Svay Reang (SRU), and
 - Chea Sim University of Kamchaymear, Prey Veng (CSUK).
 - Tbong Kmum University and Kratie University – [Under construction](#)

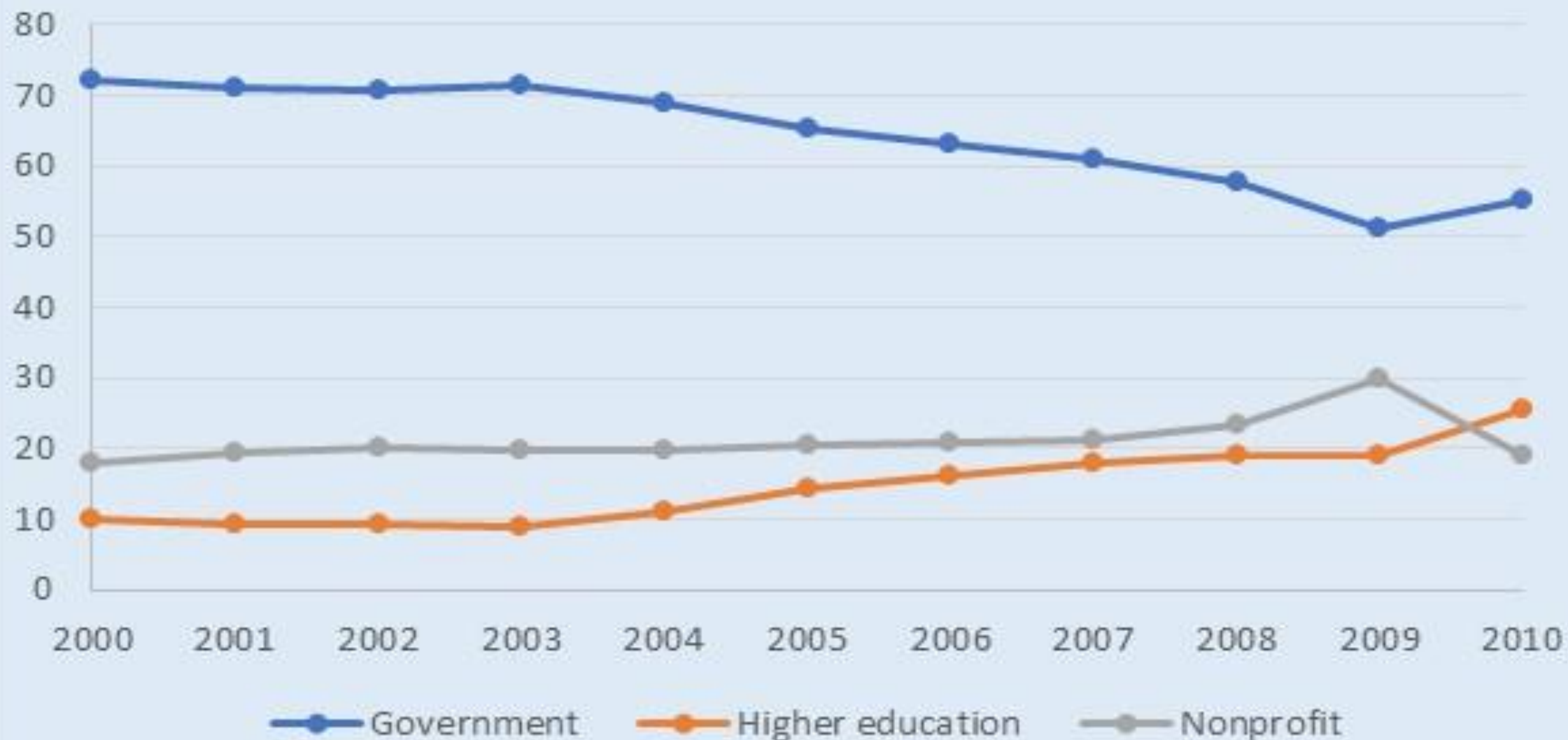
Student Enrollment in Higher Education



Researchers, Total (FTEs per 100,000 Farmers)



Cambodia (Share of total researchers, FTEs, %)



Facilities and Resources

Themes	Descriptions	CSUK	RUA	SRU	UBB	PLNSA	MCU
Facilities	Faculty of Agriculture	√	√	√	√	√	√
	Agricultural laboratory (soil lab, aquaculture pond, etc.)	√	√	√	√	√	√
	Agricultural research and extension office or similar	×	√	×	×	√	×
	Farmer or community relation office or Technology transfer	×	×	×	×	×	×
Activities in agriculture	Doing research in agriculture	√	√	√	√	√	√
	Collaboration with NGOs	×	√	√	√	√	√
	Collaboration with Government Departments	√	√	√	√	√	√
	Collaboration with private agricultural companies	√	√	×	√	√	√
	Short course training in agriculture to farmers, NGOs, etc.	√	√	×	√	√	×

Research Projects

- Funded for specific activities and serving the purposes of research and development (R&D) from:
 - International Funding Agencies,
 - University Fund,
 - No government fund being reported, and
 - Student contribution,
- Fairly small in amount and not pure science research but for capacity development,
- Limited farmers being covered, and
- No agro-ecological research being particularly reported.

Strengths

- Infrastructure, facilities and locations are appropriate for ARE,
- Free human resources in contribution to field work (students),
- Existing and newly qualified graduates are interested to serve the services at university level,
- More number of graduate and undergraduate enrollment, and
- Strong connection to rural areas via students as agriculture students mainly live in rural area

Opportunities

- Developing and implementing agricultural projects under international support
- Possibility in request for implementing large scale project of the government donor funded projects
- Transparent and accountable management would make the change
- ARE is highly potential as per expansion of agriculture market
- Using small amount of budget by contribution of students and allocation of HEIs' fund would be an option
- Possibility in connection to private companies to operate agriculture technological testing and studies

Conclusion

- Not significant but become potential,
- Trend of HEIs is to focus more on research and extension,
- Ready to catch up with new investment and implementation,
- Profit attractiveness of the sector for HEIs to seek for collaboration.

Recommendation

- Synergy among HEIs in the promotion of agriculture sector or more specialized in agriculture related field,
- Develop Road Map, guideline in agricultural research and extension, particularly for HEIs,
- Strengthen international collaboration and implementation of joint research projects,
- Allocate or invest more fund for physical facilities in scientific research, and
- Seek for policy level of RGC to attract more implementation and resource allocation,



Thank You !