



# Human Resource Development for Sustainable Agricultural Mechanization in Cambodia

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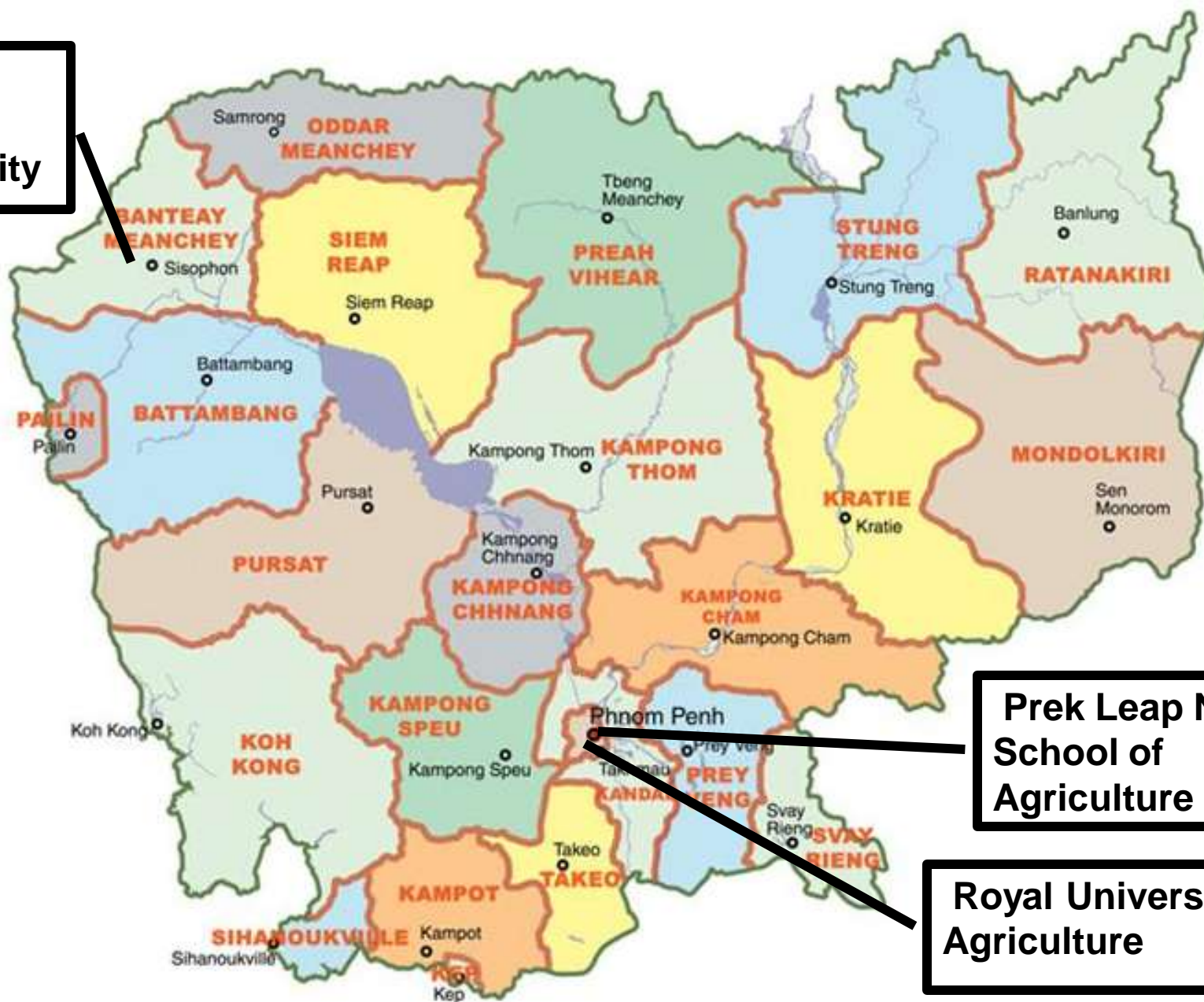
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# Institutions offered Agricultural Engineering/Mechanization Programme

- Royal University of Agriculture
  - Located in Phnom Penh
  - Offering bachelor degree
- Mean Chey University
  - Located in Banteay Meanchey province, northwestern part of Cambodia
  - Offering master and bachelor degrees
- Prek Leap National School of Agriculture
  - Located in Phnom Penh
  - Offering associate degree

Mean  
Chey  
University



Prek Leap National  
School of  
Agriculture

Royal University of  
Agriculture

# Royal University of Agriculture

- The university was founded in 1964
- After Khmer Rouge regime, it was reopened again in 1984 as Institute of Agricultural Technology Chamkar Daung
- Began offered agricultural mechanization programme (bachelor) in 1985 with the support from the former Soviet Union
- The department was promoted to Faculty of Agricultural Engineering in 1996 after the institute was renamed to Royal University of Agriculture
- Renamed to Faculty of Agricultural Technology and Management around 2000 to adapt to job market demand and widen job opportunity of its graduates
- Renamed back to Faculty of Agricultural Engineering in 2014 in response to increasing agricultural mechanization in Cambodia

# Mean Chey University

- Founded in 2008
- Offering both master and bachelor degrees
- Agricultural engineering programme is offered as a major under Faculty of Agriculture and Food processing

# Prek Leap National School of Agriculture

- Founded in 1953
- At the beginning mainly focused on producing agricultural agents
- In academic year 2002-2003, begins offer bachelor degree programme in the fields similar to Royal University of Agriculture
- Offering associate degree (2-year programme) in agricultural mechanization

# Faculty of Agricultural Engineering and Its Research Focuses

- Departments:
  - Soil and Water Engineering-focused on soil and water conservation, on-farm water management
  - Agricultural Machinery-focused on design and testing, repair and maintenance of agricultural machineries, installation and optimization of machine systems
  - Post-harvest and Food Processing Engineering-focused on design and testing, repair and maintenance of agricultural machineries, installation and optimization of machine systems used in storage and processing of foods
  - Agricultural Energy and Environment- on management of wastes originated from agriculture, alternative energy sources for agriculture, and controlled environment agriculture



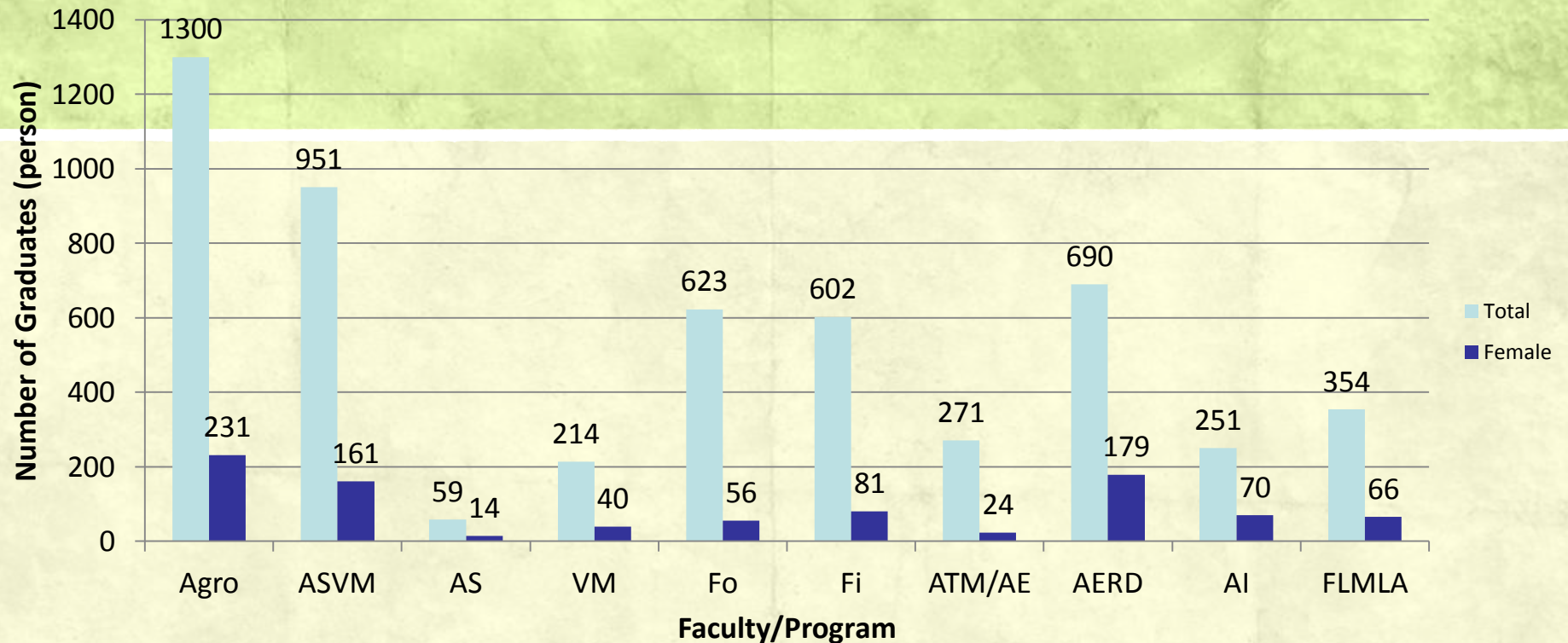
# Staff

- The faculty has 7 full-time lecturers with master degrees, 3 with degrees related to agricultural engineering/ mechanization
- The rest is part-time lecturers from other faculties of the university, and institutions from outside

# Current Students

Year	Scholarship of MoEYS		Other Scholarship		Tuition		Total	
	Female	Total	Female	Total	Female	Total	Female	Total
2	6	17	1	7	1	5	8	29
3	5	19	0	0	0	5	5	24
4	6	21	4	16	2	13	12	50
Total	17	57	5	23	3	23	25	103

## Graduates of Royal University Agriculture by Faculty (1985-2013)



**Note:**

- Agro: Faculty of Agronomy
- ASVM: Faculty of Animal Science and Veterinary Medicine
- AS: Faculty of Animal Science
- VM: Faculty of Veterinary Medicine
- Fo: Faculty of Forestry
- Fi: Faculty of Fisheries
- ATM/AE: Faculty of Agricultural Technology and Management/Agricultural Engineering
- AERD: Faculty of Agricultural Economics and Rural Development
- AI: Faculty of Agro-industry
- FLMLA: Faculty of Land Management and Land Administration

# Programmes offered

- Two undergraduate programmes in Agricultural Engineering and Agricultural Technology and Management
- 4-year programmes
- Year 1 is the foundation year in which all students study the same courses. They move to their respective faculty from Year 2 until graduation.
- Thesis is a requirement for graduation of each student

# Agricultural Engineering Programme

- Since 2014, this program is offered to students
- Its curriculum was developed with technical support from a CIM/IRRI expert
- In addition to courses related to engineering, courses which provide knowledge and skills in business management were included in the curriculum as elective courses in order prepare more graduates to be entrepreneurs.

# Agricultural Technology and Management Programme

- This programme was replaced by Agricultural Engineering in 2014
- However, there are still two more batches of students who are studying in this programme
- Its curriculum has fewer courses related to engineering and more courses related to technology management

# Need Assessment, Challenge, and Constraints

- **Popularity of the programs-** there is less number of students who enroll in the programmes compared to others.
- **Capacity of lecturers-**currently, the faculty encounters the lack of lecturers in some courses related to engineering.
- **Practical and research facilities-**the faculty has a mechanical workshop with old machine tools remain since the Soviet time. Only small machinery is available for students to support their practical activities such as 2-wheel tractor, and some small implements. For other practical activities, we need to collaborate with our partners. Beside Department of Agricultural Machinery, very limited practical facilities are available for other departments.

# Suggestions for Regional Cooperation

- **Student exchange**-with the exchange opportunity, our students can receive high quality education which offered in partner universities. However, the language barrier has to be solved. External financial support is needed.
- **Capacity building of lecturers**-on-job and short training courses should be used to build capacity of lecturers.
- **Joint research**-some research themes are regional and global in nature. The involvement of our researchers in those research help to build their capacity in research. It is also possible to receive funding from donors to implement project in Cambodia.



# Contributions for Regional Cooperation

- Although our financial resource is limited, we are committed to allocate existing staff and facilities for research and cooperation.

**Thank you very much**

