

Expert opinion elicitation method: Experience of IRRI

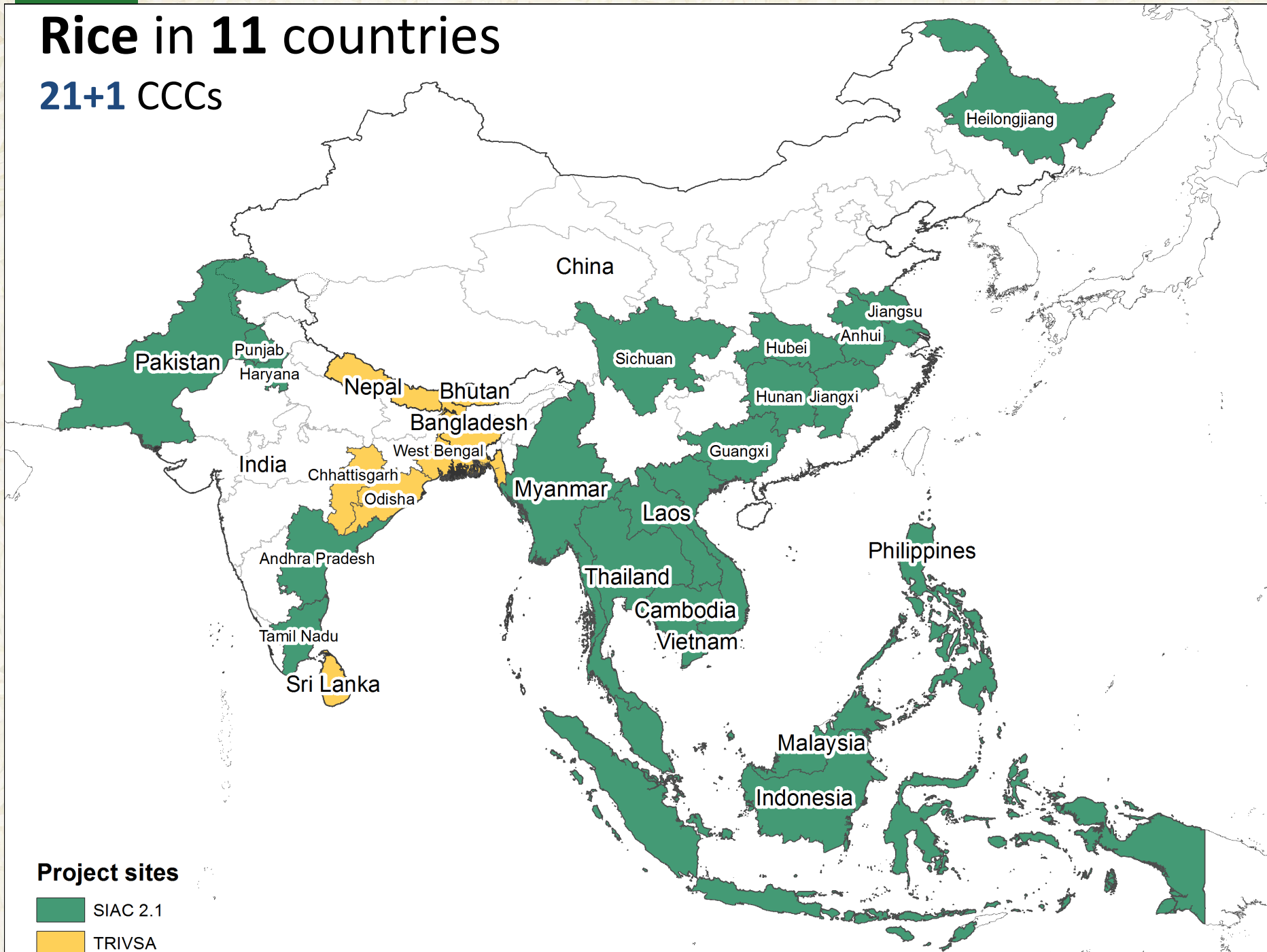
Alice G. Laborte

Social Sciences Division

International Rice Research Institute

Rice in 11 countries

21+1 CCCs



EE method applied in 14 CCCs

Country/State/Province`		No. of experts	Estimates by subregion	Estimates by season	Deviated from protocol?
Cambodia		18		✓	✓
Laos		10	✓	✓	
Pakistan		21	✓		
Vietnam		9	✓		
India	Andhra Pradesh	16		✓	
	Telangana	16		✓	
	Haryana	9		✓	
	Tamil Nadu	13		✓	
China	Anhui	10		✓	✓
	Guangxi	11		✓	✓
	Heilongjiang	8			
	Hubei	10		✓	✓
	Hunan	11		✓	
	Jiangxi	10		✓	

Cambodia

- a. Group 1: CARDI and other government offices under the Ministry of Agriculture
Group consensus achieved through discussion
- b. Group 2: provinces near Vietnam (Kampot, Takeo, Prey Veng, Svay Rieng, Kampong Cham, Kampong Speu).
Group consensus achieved by taking into account individual estimates and rice area
- c. Group 3: provinces near Thailand (Siem Reap, Battambang) and provinces in the central part (Kampong Thom, Kampong Chhnang).
Group consensus achieved by taking into account individual estimates and rice area

Cambodia

- Consensus for whole country:
DS and EWS: Average of 3 groups
WS: Average of individual estimates of Group 1
- Lengthy discussion on the WS estimates.
Varietal adoption for the combined DS and EWS was easier to estimate because all DS rice areas are grown to MVs and dominated by 1 variety, IR50404.

Variety	Year of release	CARDI survey (2010-13)	EE (2014)	Difference
Phka Rumduol	1999	18	19	-1
Riang Chey	1999	10	8	2
CAR9	1996	3		3
IR50404	Vietnam	2	2	0
CAR5	1995	1		1
CAR6	1995	1	2	-1
Sen Pidao	2002	1	2	-1
Phka Rumdeng	2007	1		1
Phka Romeat	2007	1	2	-1
CAR4	1995	1	2	-1
Phka Chansensar	2010	0	5	-5
IR66	1990	0	2	-2
Chul'sa	1999	0	2	-2
Sen Kra Ob	Thailand	0	2	-2
Other MVs		4	4	0
TV		57	48	9

Deviation from protocol

China (Anhui, Guanxi)

- Experts could not estimate area by variety
- Many varieties have been released and adopted
Rice breeding institutions: Anhui= 126; Guanxi= 181
Varieties released since 1983: Anhui=327; Guanxi=621
- Estimates given by varietal group or varietal series
 - A varietal series consists of 5-10 varieties with similar pedigree, i.e. one parent is the same
 - Experts expressed doubts with the classifications made because varieties in 1 series sometimes have varying maturity.

Top 4 MVs in selected provinces in China

Variety	Year of release	%Area
Anhui		
Inbred japonica rice	variety series	15
guangzhan series	variety series	14
Yyou series/Y58S series	variety series	12
1892S series	variety series	10
Guangxi		
Inbred rice	variety series	23
boyou series	variety series	14
Yliangyou series	variety series	14
teyou series	variety series	9
Hubei		
yangliangyou6hao	2003	6
fengliangyouxiang1hao	2007	5
ezao series	variety series	3
guangliangyou616	unidentified	3
Hunan		
huanghuazhan	2007	4
xiangzaoxian45hao	2007	3
zhuliangyou819	2006	3
zhongzao39	unidentified	3

Top 10 varieties (from statistics)

Variety	Year of release	%Area
Sichuan		
Yixiangyou2115	2011	3
Fyou498	2009	2
Dexiang4103	2008	2
Gangyou188	2005	2
Chuanyou6203	2011	2
Chuanxiangyou198	2010	2
Nei5you39	2009	2
Rong18you188	2010	2
Yixiang4245	2009	1
Gangyou725	1998	1
Other MVS		81

What worked?

- + quick assessment (half day)
- + cost-effective method
- + convening experts from various disciplines worked (experts appreciated the value of this)
- + providing list of varieties helped experts in most cases
- + through discussion, experts elaborate their reasons/justifications for estimates
- + relatively easy for experts to estimate area under widely grown varieties

Challenges

- Identifying experts and convening them
- Some experts dominate the discussion (importance of facilitator)
- Varieties may be known under different names in different locations (e.g., Cambodia)
- Experts had difficulty in the first round
 - Some complained that we should have sent the forms or the procedure earlier.
 - Those from provinces (e.g., extension agents) cannot provide national level estimates
- Difficult to estimate for varieties not widely grown
- Does not always work (e.g., Anhui and Guanxi, China)

Confidence in results

- Method not appreciated in Andhra Pradesh and Telangana because varietal adoption is monitored through seed intent (amount of seeds needed) that is submitted for use in seed production of seeds. Seed replacement rate is 87% (2011)
- Mixed reviews in Haryana, India:
 - 2 experts (agronomist and extension) said the results fully represent what is happening on the ground
 - 1 expert (social scientist) said they are all guesstimates

Confidence in results

- Over-all, positive feedback from experts
- Some experts said they will use the method to assess adoption of other crops (Tamil Nadu) or crop management practices (Laos).
- The method is useful in obtaining estimates of varietal adoption. No such statistics is available at the national level (Pakistan).
- One expressed surprise that such an evaluation can be useful (Laos).
- Experts were keen to have a copy of the estimates and inform their superiors of the results (Laos).