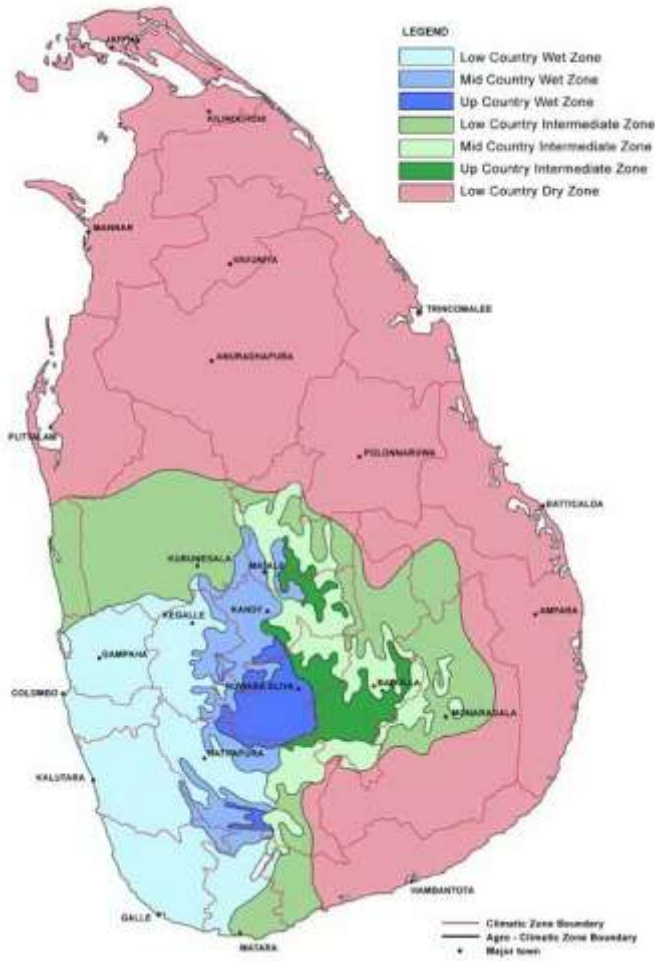


Rice Research Investments, Varietal Release and Adoption in Sri Lanka



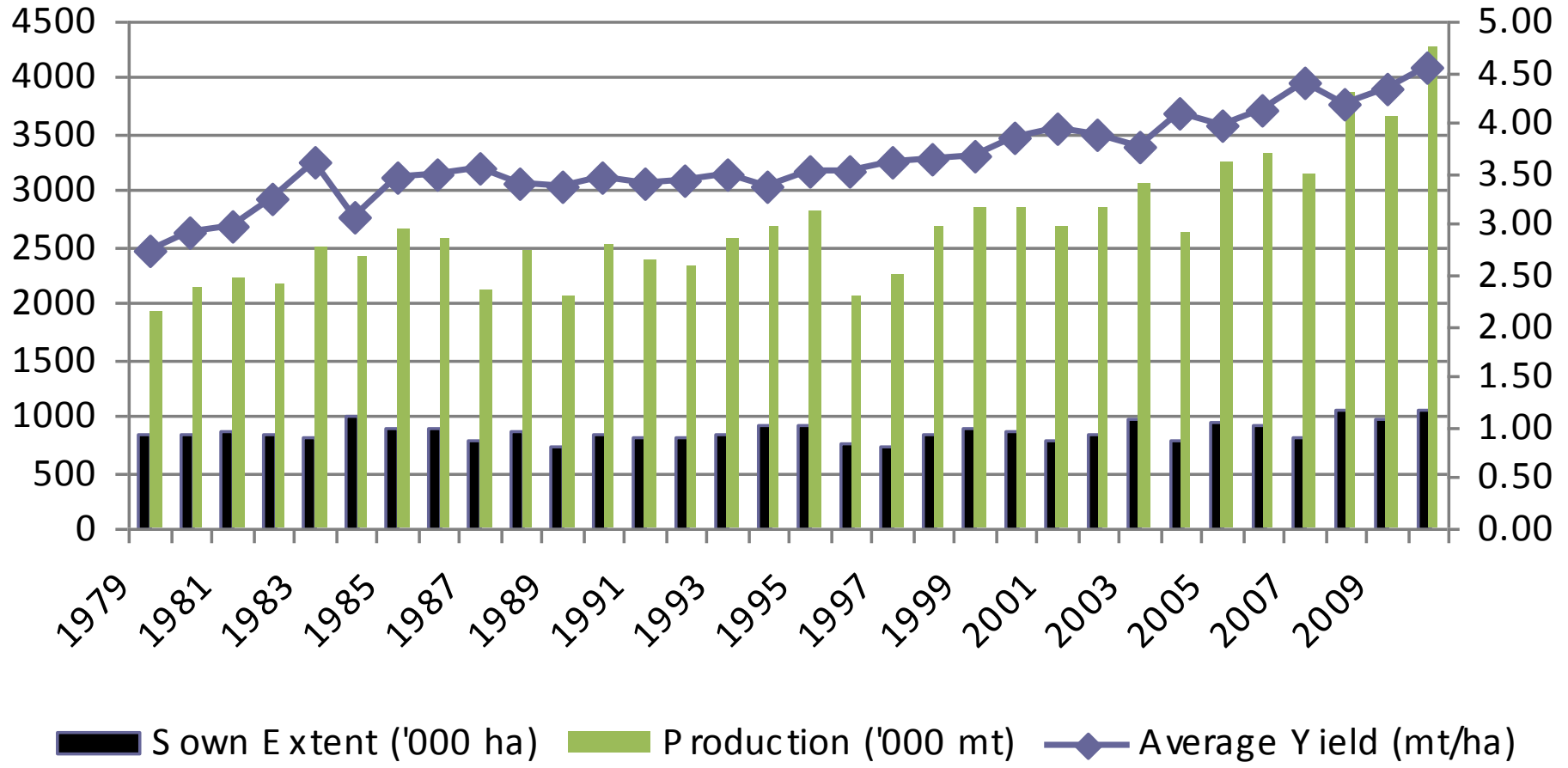
**B.R. Walisinghe, R.D.D.P. Rajapaksa, S. Pandey,
D.M.N. Dissanayake, Ma.Lourdes Velasco and T.H.C.S. Perera**

Country profile



- 20 million population
- Major climatic zones – Dry, Intermediate, Wet
- Agriculture contribution 12% of GDP
- Rice- staple food, 15% Agriculture GDP
- Rice cultivation – *Yala & Maha* seasons
- Water source - 47% Major, 25% Minor, 28% Rainfed

Trends in extent, production and average yield of paddy in Sri Lanka



Objectives

- To Assess the investment in rice research and development
- To estimate rice varietal spread in Sri Lanka

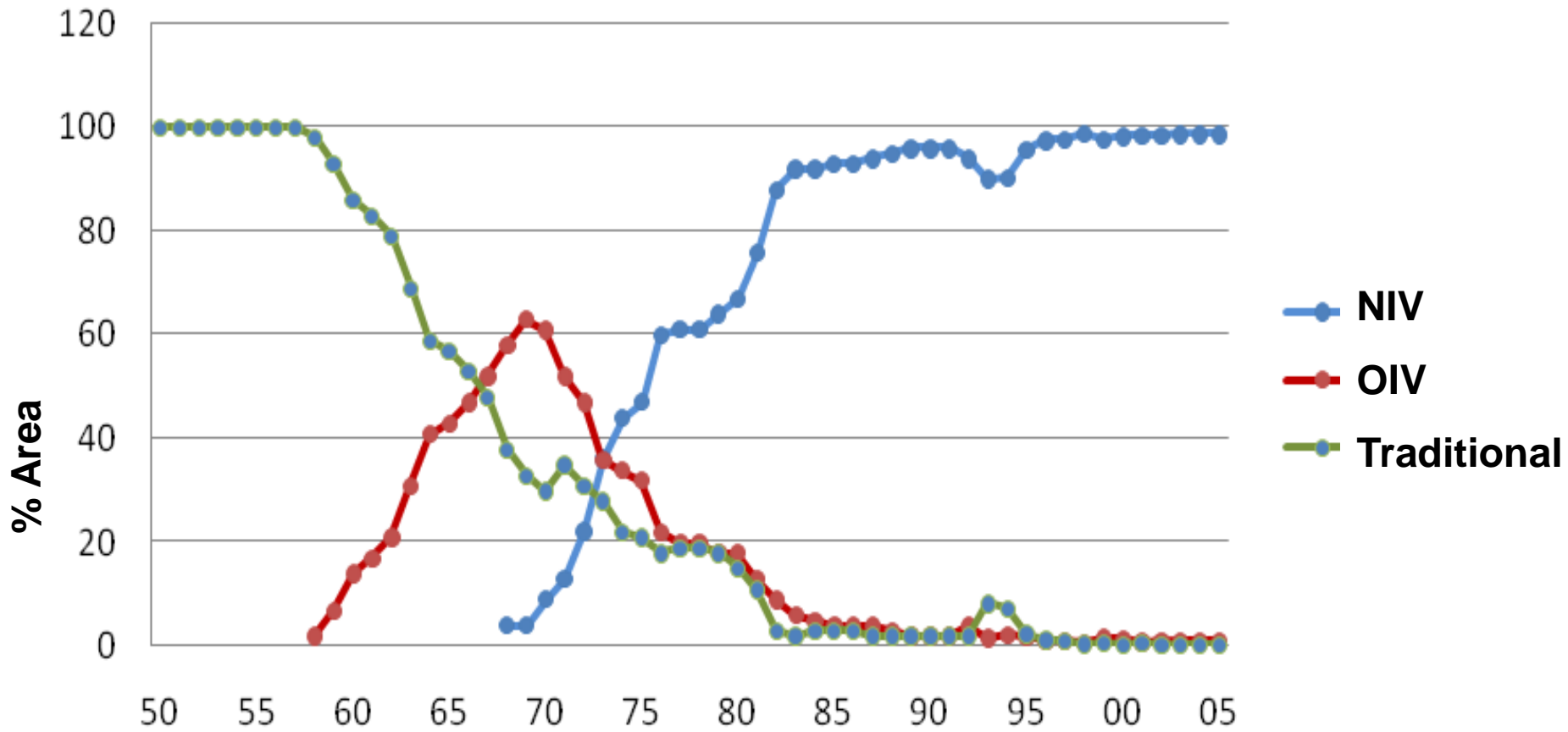
Research Investment

- Of total research budget, 70% for rice breeding
- Out of total allocation for rice breeding 65% for line development & 35% for line evaluation
- investment in rice cultivation in unfavorable areas is neglected

Rice production in different ecosystems in Sri Lanka - 2010

	<i>Maha Season</i>		<i>Yala Season</i>	
Eco System	Sown extent ('000 ha)	Average yield (t/ha)	Sown extent ('000 ha)	Average yield (t/ha)
<u>Dry Zone</u>				
Major	253.57	5.32	215.14	4.66
Minor	74.08	4.67	25.27	3.96
Rain-fed	68.02	3.24	3.09	3.91
<u>Intermediate Zone</u>				
Major	38.67	5.04	29.2	4.85
Minor	56.27	4.07	39.29	3.72
Rain-fed	48.44	3.82	25.59	3.15
<u>Wet Zone</u>				
Major	13.14	3.93	12.18	3.82
Minor	29.68	3.59	22.25	3.39
Rain-fed	64.15	3.44	47.22	2.97
<u>All</u>				
Major	305.38	5.32	256.53	4.98
Minor	160.03	4.21	86.81	3.81
Rain-fed	180.62	3.62	75.91	3.26

Trends of Variety Adoption in Sri Lanka

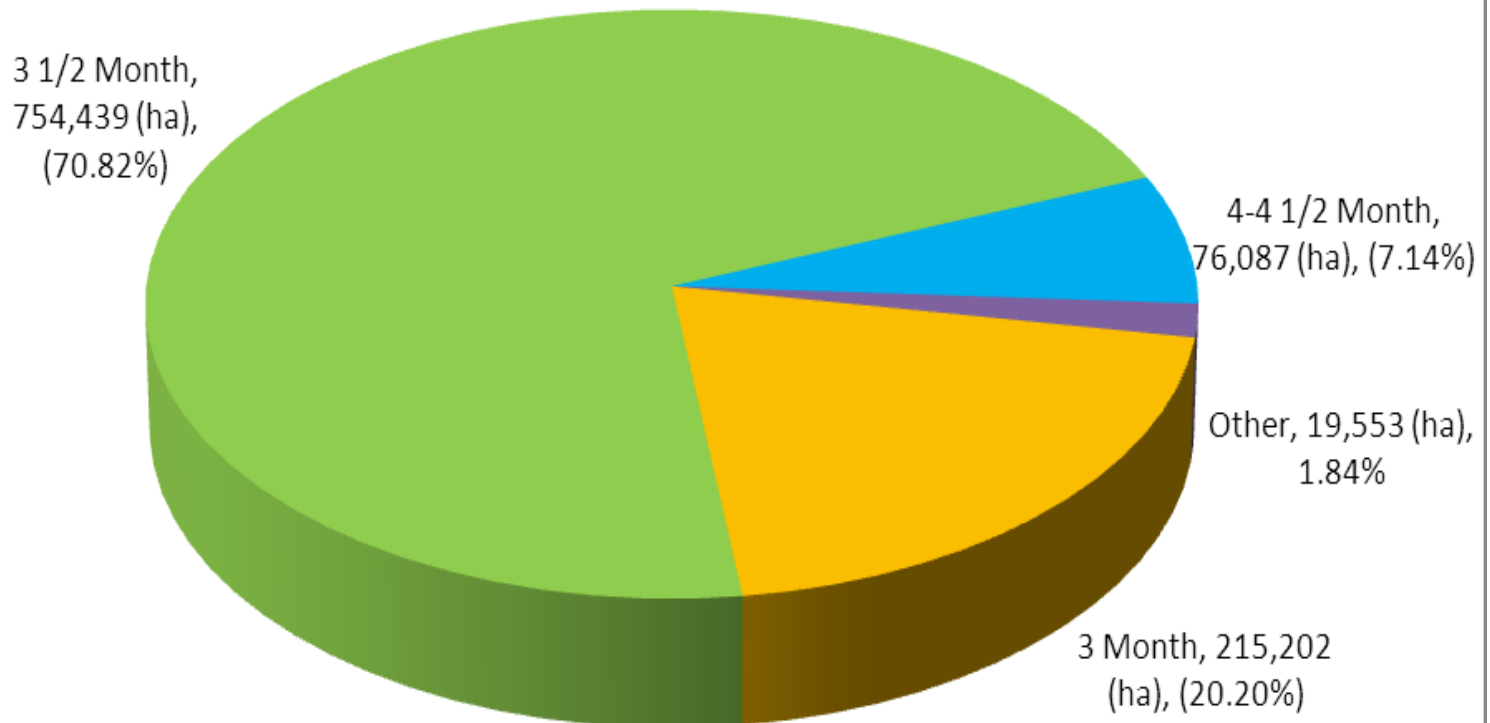


Released rice varieties in Sri Lanka :2000 -2010

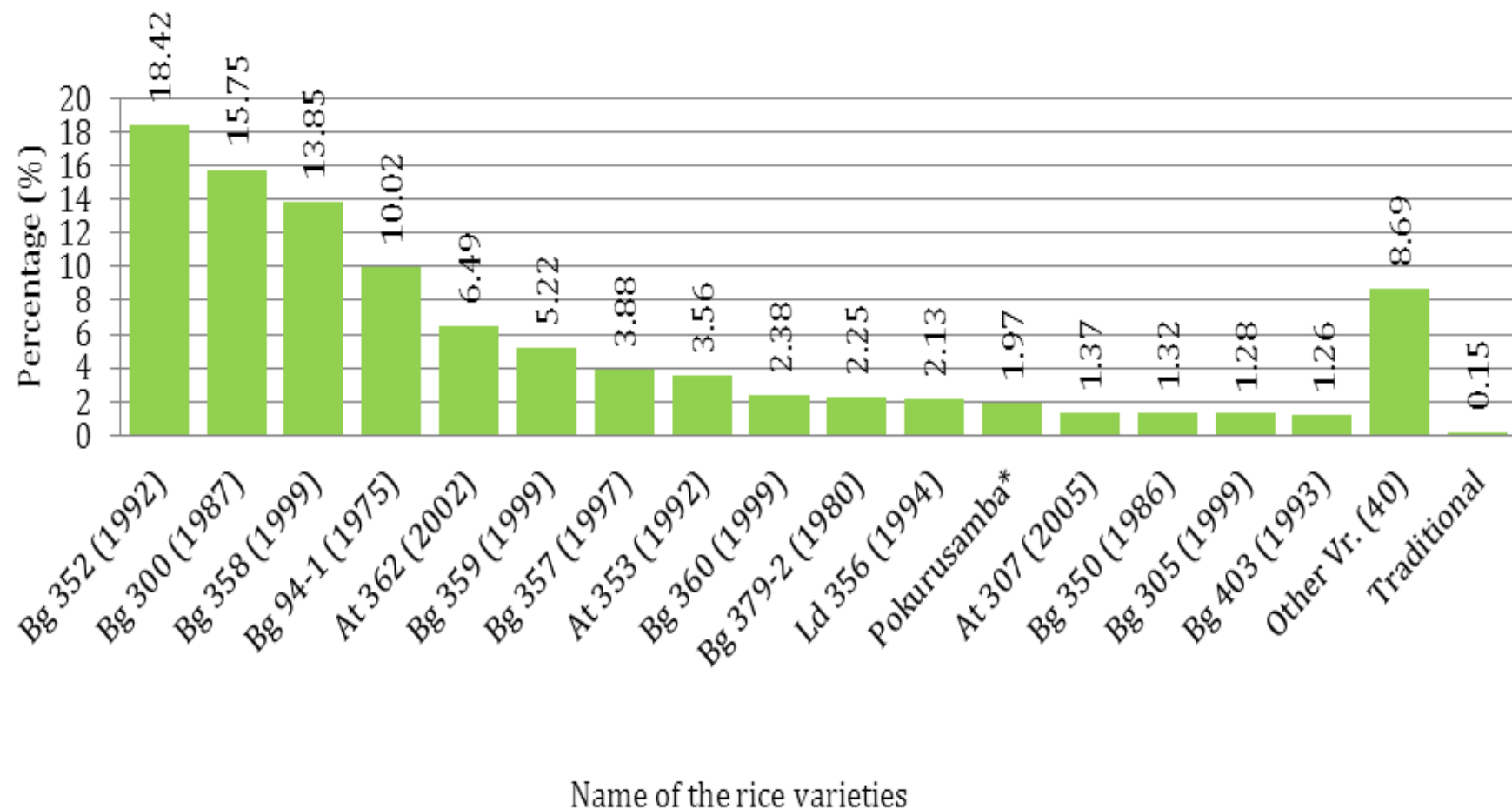
Released Year	Age Group (months)	Variety	Pedigree	Potential yield (t/ha)	Target area
2002	3 1/2	At 362	At 85-2/Bg 380	10	General cultivation
2002	3 1/2	Bw 361	IR 36/Bw 267-3-11M	10	General cultivation
2003	3 1/2	Bw 363	IR 36/Bw 267-3-11M	10	General cultivation
2004	3	At 306	OB 2273/At 05	6	General cultivation
2005	2 1/2	Bg 250	Selection from farmer field	4.5	Drought and Flooded area
2005	3	At 307	Bg 2225-1//Bg 96-3298	7	General cultivation
2005	4- 4 1/2	Bg 406	Bg 73-797/ptb 33/ob 678	7	Northern region
2005	4- 4 1/2	Bg 407H	Bg CMS 1A x IR54742-22-19-3R	13	High potential area
2005	4- 4 1/2	Bg 454	MR 1523/87-519	9	General cultivation with assured supply of water
2006	3 1/2	Bw 364	IR 36/Bw 267-3-11M	8	Wet zone
2008	3 1/2	Ld 365	SEL Ld 355	6	Wet zone
2008	3	At 308	Bg 2225-1/Bg 2426-2	6	General cultivation
2009	3 1/2	Bg 366	Bg 300/94-2236//Bg 300/Bg 304	9	General cultivation
2010	4- 4 1/2	Ld 408	At 1/Ld 98-152	7	General cultivation

Rice variety spread according to Age class

VARIETAL DISTRIBUTION OF PADDY BY AGE CLASSES IN SRI LANKA - 2010



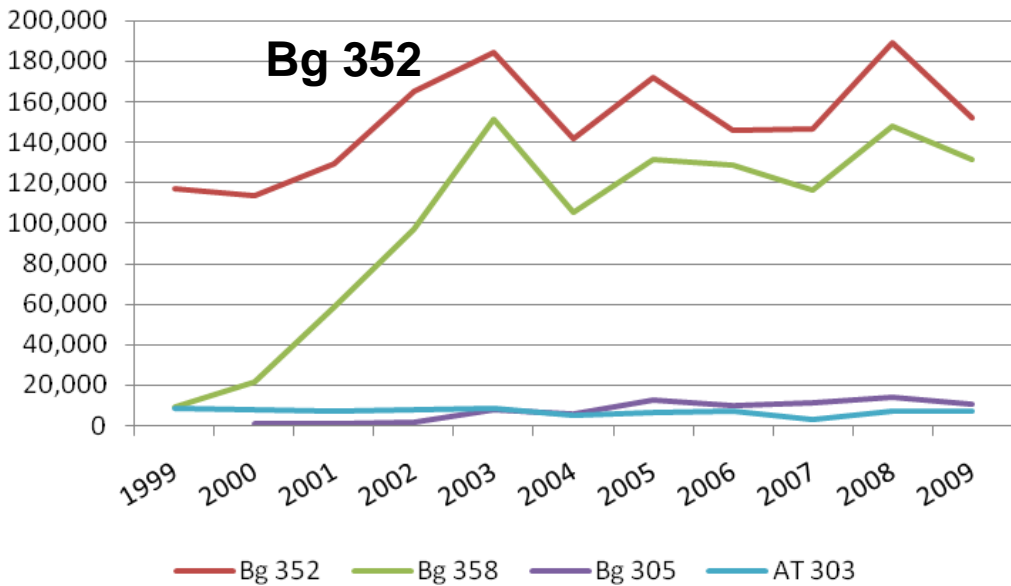
Percentage Distribution of Populor Rice Varieties in Sri Lanka - 2010



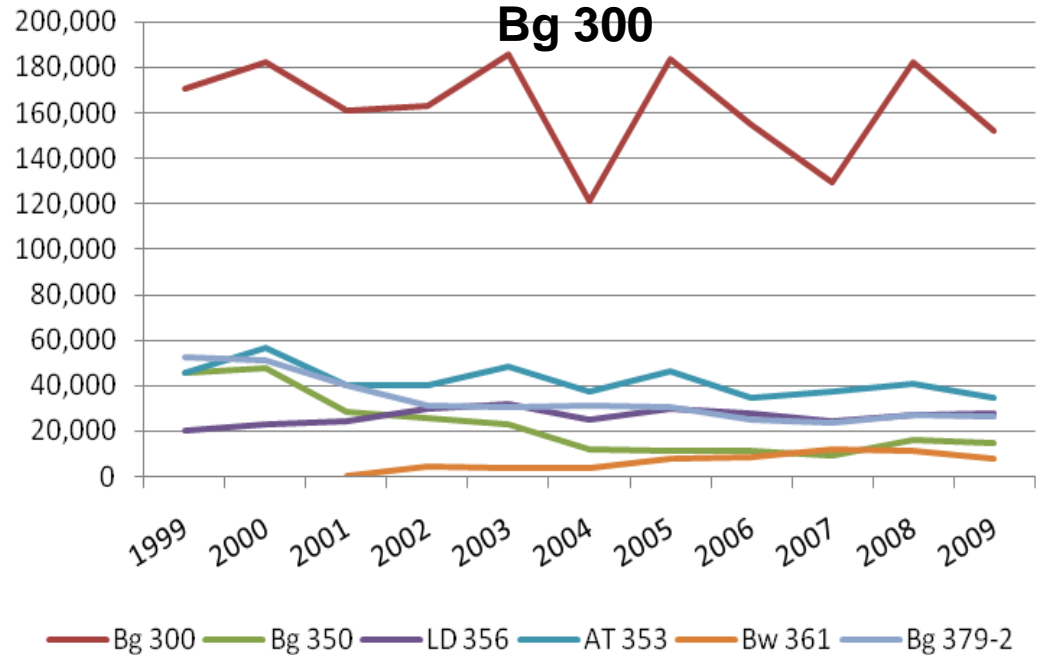
Annual Cultivatef Extent (million ha.) 1.07

Distribution of popular varieties

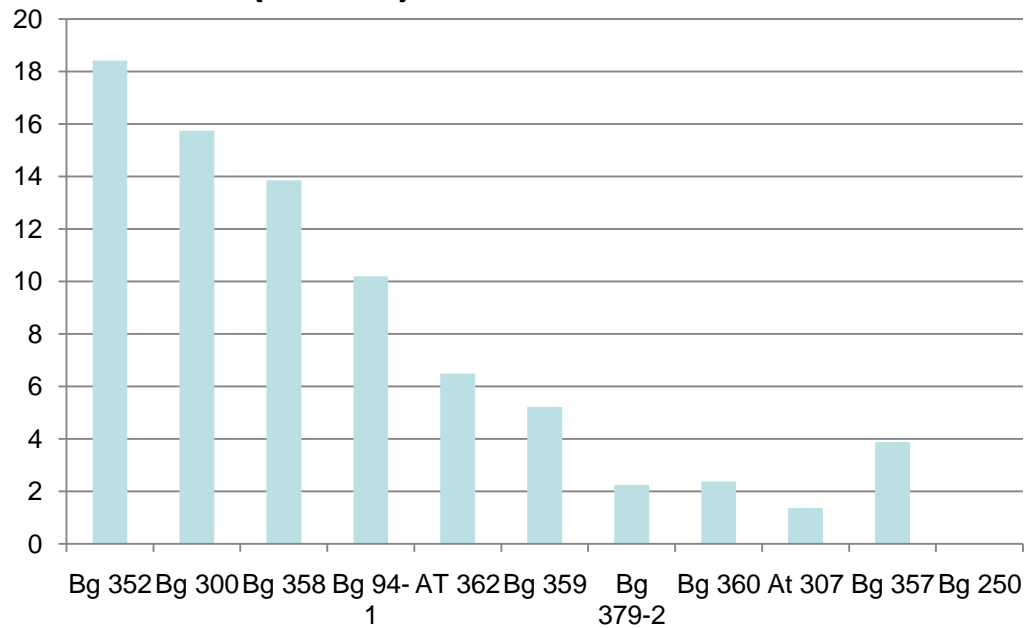
Bg 352



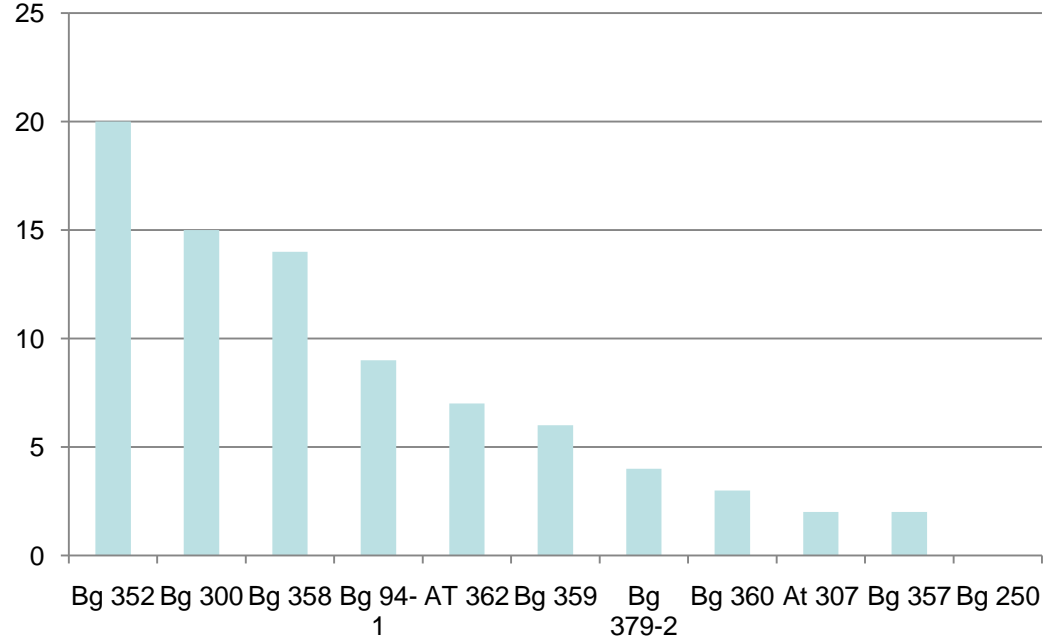
Bg 300



Rice Variety Spread –National Statistics(% area) - 2010



Expert estimates of Rice Variety Spread (% area) - 2010



Conclusions

- area & production growth is continued
- investment on rice research is concentrated to the high potential areas
- time lag in national data compilation
- expert estimates and national statistics are consistent
- expert panel estimates proved as an alternative approach

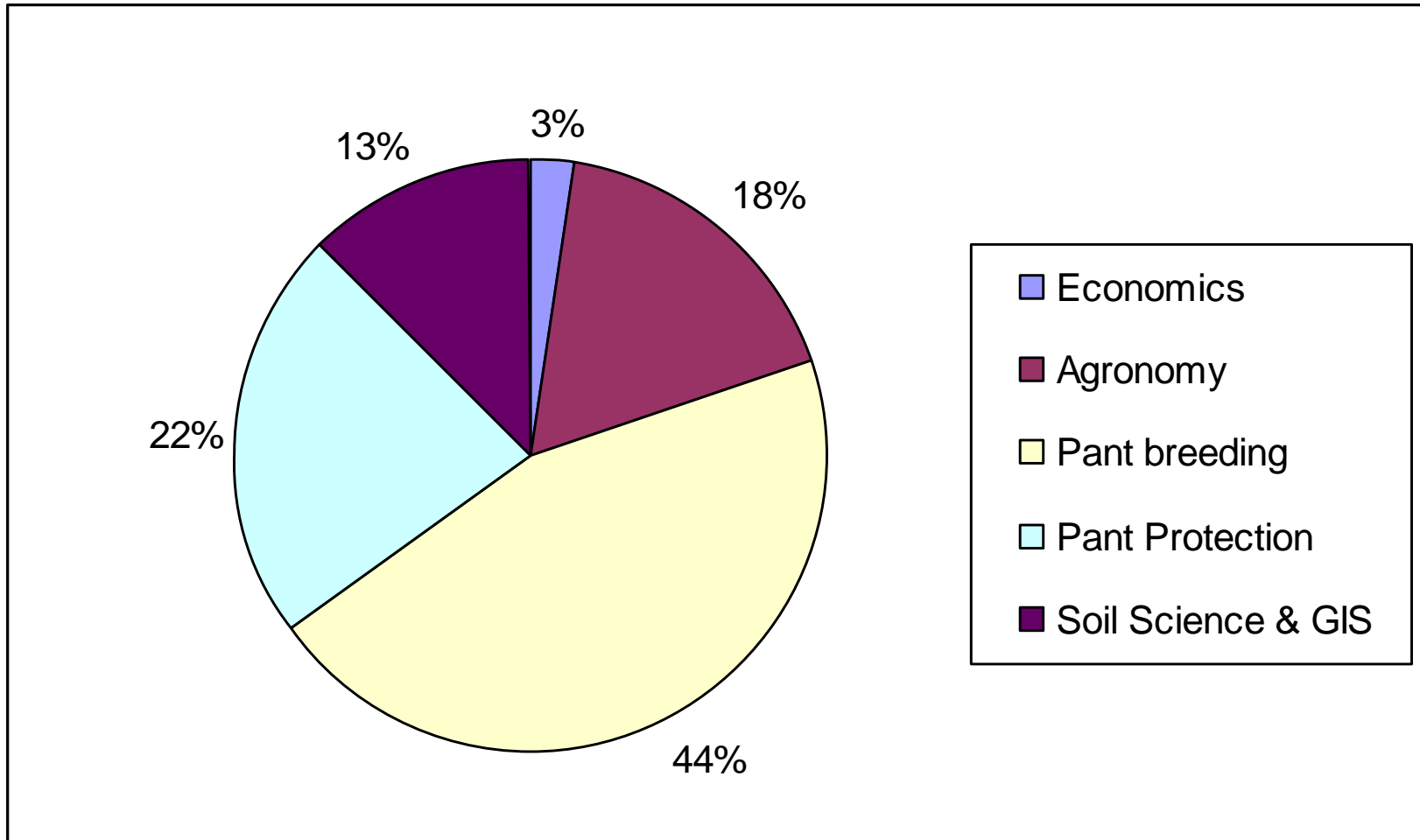
Expert panel estimation

- Advantages – rapid, less costly, can use to validate survey findings
 - Participatory approach
 - Statistically sound
- Disadvantages
 - Should have fair representation
 - Limited scope
 - Mismatching estimates with individuals/groups



Thank you

Sample composition of scientist survey



FTE basis for rice research Investment

Rice ecosystem	Average time allocation by scientists (%)
Dry	32
Intermediate	17
Wet	51
Total	100