

# Research Activities of Adaptive Research Division and It's Transformation



Year 1970-2022

# **Establishment of Adaptive Research Division**

- **Applied Research and Training Division (ARTD): 1970-1989**
- **Adaptive Research Division (ARD): Since 1990**

# Mandate of Adaptive Research Division

- + Conduct adaptive research trials at farmers' field to validate advanced breeding lines and other rice production technologies in different agro-ecological environments of Bangladesh**
- + Provide recommendation to the concern division for follow up action based on the research findings and feedback obtained from farmers and extension personnel.**
- + Disseminate rice varieties and rice-based technologies among the farmers and other beneficiaries by conducting result demonstration like Seed Production and Dissemination Program (SPDP), Field day, Farmers' rally, Agricultural fair etc.**
- + Receive feedback from the farmers and extension personnel about the advantages and disadvantages of the varieties and technologies for fine tuning and improvement to be easy usable to the farmers.**
- + Conduct farmers' training to update their knowledge and skills on modern rice production techniques.**
- + Strengthen BRRl's relationship with DAE and other GO-NGO organizations involved in extension works through participating in collaborative activities of the respective organizations like meetings, workshops, conference, seminars etc.**

# Major Components of Research Program

- **Technology validation**
- **Technology dissemination**
- **Promotional activities**
- **Seed stock enrichment**

# **Research Transformation since 1970**

# Research Transformation

Period	Technology validation	Technology dissemination	Promotional activities	Comments
1970-1980: Training and Applied Research Division	<p>Applied research Trial: Project site, Collaborators : RARS, OFRD of BARI, ATI of DAE</p> <p>FVART: Fertilizer-Cum-Variety-Applied research Trial</p>	<p>Farmers- to-farmers seed production and distribution program, <b>Farmers Variety Observational Trial (FVOT),</b> 1980:CARE conducted 23 FVOT</p>	<p>Training: BRRI scientists, Extension officer, foreigner. <b>3 scientists of WARDA received 9 months training</b> 1976-77: Emphasis give on 4 month Rice Production Training</p>	<p><b>1978:</b> A national applied Research Network was initiated during the year to help develop stronger linkage between research and extension</p>

# Research Transformation

Period	Technology validation	Technology dissemination	Promotional activities	comments
1981-1989: Training and Applied Research division	1981: ALART with 50 superior lines in 57 sites of Bangladesh, none of line exceed BR3. <b>1982: Observational trial.</b>	FVOT, fertilizer trial, cultural practices, green manure, 1987:BR16, 20,21 was popular as direct seed rice in FVOT.	Training- on fertilizer application, rice cultivation etc.	1987: Follow up survey to determine the adoption pattern of BRRI varieties 1889: BR3, 11 was popular.
<b>1990: Adaptive Research Division</b>	ALART	FVOT, trials on ratoon cropping, splitting tillers, green manure.	Training: 671 participant	Pajam ratoon yielded higher(2.56 t/ha) than BR6(1.56 t/ha)

# Research Transformation

Period	Technology validation	Technology dissemination	Promotional activities	Comments
1991-2000: Adaptive Research Division	1991:ALAR T, <b>PVART</b> (Aus, deep water rice, Boro).	FVOT, SPDP, DSR, USG, rice-azolla, cultural practices, Urfa disease control Projects: IFAD.	Rice school: Orientation training, rice cultivation for farmers, BS, NGOs etc. <b>Field days</b>	1998: 223 SPDPs conducted with BRRI dhan28, 29, 31,32,33, <b>1998- Field days: 5/830</b>

# Research Transformation

Period	Technology validation	Technology dissemination	Promotional activities	Comments
2001-2010	PVART, ALART	SPDP, LCC, DSR, USG, AWD, Cultural practices, Jhum. <b>2003: Jhum cultivation</b> using BR 24,26,27, SPDP on seed health technique, PM, SRI, <i>LUM</i>	Rice school, Field days, Agricultural fair. <b>2003: 2-days workshop on DWSR.</b> <b>2004: workshop on DWSR (BIRRI-IRRI; IFAD)</b>	<b>2001:DSR: 7% yield increase, 1 week earlier</b> 2002: RPFs identified BIRRI dhan33 as short duration variety and BIRRI dhan39 is appropriate for northern region <b>2006: Seed production begins at BIRRI farm: 3645kg</b>

# Research Transformation

Period	Technology validation	Technology dissemination	Promotional activities	Comments
2011-2020	ALART <b>2014: NERICA mutant recommended for PVT</b>	AWD, SPDPs funded by MIADP, IAPP, AFACI, TRB, SPIRA, ASRS, TTFP, HNRD, KGF, Yield gap minimizing (MOA) projects and GoB	Farmers training, Field Days, SSP, FSC, Agricultural fair. 2016: plastic drum distribution initiated.	<b>2011-12: Field trial on Hasim dhan.</b>  2019-20: 2 advanced lines were recommended for PVT, among 25 advanced lines.
2020-2021	ALART	<b>New model SPDP including Seed dealer</b> , SPDPs (Cropping pattern, Double transplanting, short and long duration varieties), Adaptive trial, HHAT etc. SPDPs were funded by GoB, TRB, SPIRA.	FT: 103 (3140) FD: 68 (4935) SSP: 3.25 ton, 700 stakeholder FSC: 2 Seed production at BIRRI farm: 6.04 ton	<b>2020-21: 2 advanced lines were recommended for PVT among 28 advanced lines</b>  ALART has been conducted in collaboration with BIRRI RS since 2019.

# Research Achievement of ARD

Period	ALART	PVART	SPDP (no.)	Training (no.)	Field Days (no.)	Agricultural fair (no.)	TLS production
1995-2008	119 lines were evaluated	66 lines were evaluated , 13 were released as variety	908	FT:150 Participant: 3701	FD:48 Participant: 7676	13	22.75 ton
2009-2018	224 lines were evaluated	no	3035	FT:407 Participant : 13970	FD: 707 Participant : 83370	10	108.34 ton
2019-2021	53 lines were evaluated	no	1938	FT:194 Participant : 5870	FD:118 Participant : 11935	0	13 ton

THANK YOU