

The Impact of NARI



AGRICULTURE

48,000+
hectares

of cotton hybrid Nimbkar-1/grain sorghum variety Vasant-1 planted in the 1970s

35,000+
kg seeds

of safflower/sweet sorghum supplied all over the world in the past 24 years

5,000+

kg syrup

produced from sweet sorghum supplied nationally in the past 2 decades

800+

kg pads

of Opuntia & Nopalea cacti supplied nationally since 2010



RENEWABLE ENERGY

500,000+
ethanol stoves

disseminated across the world whose designs have been inspired by NARI's original work on low ethanol concentration stoves & lanstoves in early 2000s

100,000+

e-rickshaws

running on batteries all across the country whose designs have been inspired by NARI's original work on electric rickshaws in late 1990s

1,000

megawatt

total capacity of biomass based power plants set up across the country by IREDA based upon NARI's work on energy self-sufficient talukas



ANIMAL HUSBANDRY

200,000 +
doses

of buck semen supplied locally & all over the country in the past 24 years

20,000+

goats

vaccinated/parasite-protected/dewormed in the last decade

10,000+

shepherds

benefitted by the efforts of the Animal Husbandry Division of NARI since 1994

2,000+

sheep and goat

(NARI Suwarna, Boer/Damascus cross) supplied nationally in the past 24 years



NARI's Pioneering Work

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T

Private agricultural research institute in India - since 1968

To introduce sweet sorghum crop in India - 1970s

In the world to set up a solar powered ethanol distillation plant - 1987

In the world to use solar still for producing water from soil for tree-planting in deserts - 1988

To introduce and popularize sweet sorghum syrup in India - 1990s

To market safflower petal herbal tea in India - 1991

And only NGO in India to run a sheep breeding program for 24 years - since 1994

In Asia to set up a loose leafy biomass gasification plant - 1997

In the world to develop an electric cycle rickshaw - 2000

In the world to develop a non-spiny hybrid of safflower - 2002

In the world to develop a solar powered safflower petal collector - 2004

In the world to develop a stove running on low concentration ethanol - 2006

In the world to develop an ethanol lanstove (lantern cum stove) - 2006

To develop technology for cervical AI of goats under field conditions in India - 2010

In India to set up a modern goat buck semen freezing laboratory - 2014



Other Contributions of NARI

- Was the principal author of the national policy on Taluka Energy Self-Sufficiency operated by MNES, Govt. of India in the late 1990s
- Gave the design of the solar soil water still to National Dairy Development Board in Anand for producing potable water in Kutch area, Gujarat, India
- Conceptualized a sustainable model for rural restaurants upon which many subsidised food programmes like Amma Unavagam in India operate
- Donated its building to Pragat Shikshan Sanstha to set up a school, Kamala Nimbkar Balbhavan in Phaltan, Maharashtra, India

NARI and its staff have served in the following committees

- (1983-88) Expert panel on Rural Domestic Energy, Advisory Board on Energy, Govt. of India
- (1990-96) Sub group on Energy and Environment, Planning Com., Govt. of Maharashtra
- (1995-05) Senate, Shivaji University, Govt. Of Maharashtra
- (2000-14) State Adv. Committee to MERC, Govt. of Maharashtra
- (2001-02) Sub Group on Resource Mobilization for NRSE, Planning Com., Govt. of India
- (2003-04) Sub Group on Rural Technology Transfer, Planning Com., Govt. of India
- (2003-05) Core Adv. Group for Rural Technologies, PSA to Govt. of India
- (2004-06) National Com. on Farmers, Ministry of Agriculture, Govt. of India
- (2015-18) Board of Trustees, International Livestock Research Institute, Nairobi, Kenya



Collaborators and Funding Agencies

Industrial

Hindustan Lever Ltd. purchased sunflower hybrid NSH-7 In 1980s

Nagarjuna Fertilizers and Chemicals Ltd. & NARI signed a 5 year contract to breed sweet sorghum as an energy crop in 2000s & also purchased NARI's alcohol stove patents

Bombay Oil Industries (Marico Ltd.) funded a project on improved safflower hybrids/varieties & also licensed the variety NARI-57 in 2010s

Funding was also given by the following

- Bajaj Group •Kirloskar Group •ICICI Ltd.
- Cummins India Ltd. •Indian Cotton Mills Federation •Nimbkar Seeds Pvt. Ltd.

Institutional

International

- Australia** •Univ. of New England •CSIRO
- Univ. of Melbourne •ACIAR
- U.S.A.** •Rockefeller Foundation •USDA
- Texas A&M Univ. •E&Co.
- Europe** •International Foundation for Science
- Danida Forest Seed Centre •FAO
- Univ. of Oxford •EEC

National

(bodies under Govt. of India/Maharashtra)

- DST •DBT •CSIR •ICAR •MNRE
- MACOST •Advisory Board on Energy •Dept. of Atomic Energy

← NARI's Reach →

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|  WEBSITE 20,000,000+ views on the institute website since its inception |  MEDIA 10,000,000+ readership on the articles published nationally & internationally |  WORKSHOPS 36,000+ attendees in the workshops & visits conducted at the institute |  BOOKLETS 35,000+ copies of manuals distributed for training in sheep/goat management |  TALKS 10,000+ attendees to the talks delivered by the institute staff outside the campus |
|  CITATIONS 1,600+ citations in refereed journals |  ARTICLES 700+ publications in refereed journals, magazines & newspapers |  TRAINING 100+ courses conducted nationally & internationally |  INTERNSHIPS 70+ interns from all over India & 9 countries around the world |  PATENTS 7 patents filed & granted nationally |

Awards

NARI and its staff have been honoured by the following major awards

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|  Alumnae of Distinction Award, University of Florida, U.S.A.(1997) |  Solar Hall of Fame, U.S.A. (1998) |  Jamnalal Bajaj Award, India (2001,2016) |  FICCI Platinum Jubilee Award, India (2002) |
|  HARDF Award, India (2003) |  Energy Globe Award, U.S.A. (2004) |  Padma Shri, Govt. of India (2006) | |
|  Vasanthrao Naik Agriculture Award, India (2006) |  CSIR Award for Rural Development, India (2007) |  Globe Sustainability Research Award, Sweden (2009) |  Distinguished Alumnus Award, University of Florida, U.S.A. (2014) |

NARI has successfully completed more than **90 projects** in the past **50 years** with a total funding of **Rs. 180 million** (450 million at current market price). **Every rupee** spent on NARI's projects has generated a revenue of approximately **150 rupees**.

And the legacy continues...