# Seeds that give revisited

Participatory plant breeding and rural revitalization

Yiching Song, Ronnie Vernooy © Editors-in-chief Lanqiu Qin, Linxiu Zhang © Associate editors-in-chief

CHINA AGRICULTURE PRESS · BEIJING

### CONTENTS

Preface	Small seeds and a big story: Enlightenment from participal plant breeding Yongping Yang	tory
Introduction	A "new" approach revisited: Participatory crop improvement and resilient seed systems Ronnie Vernooy, Yiching Song	t 1
Part 1	International cases	
	Return to diversity: Evolutionary plant breeding Salvatore Ceccarelli	23
	Participatory plant breeding in North Africa and the Near Eas Nearly 25 years of experience Salvatore Ceccarelli, Alessandra Galiè, Stefania Grando	t: 37
	Farmer–plant breeder collaboration: The case of sorghum breeding in West Africa Eva Weltzien, Fred Rattunde, Mamourou Sidibe, Kirsten vom Brocke, Abdoulaye Diallo, Bettina Haussmann, Bocar Diallo,	54
	Baloua Nebie, Aboubacar Toure, Anja Christinck	

## Farmer field schools and participatory plant breeding in Zimbabwe

Hilton Mbozi, Joseph N. Mushonga, Patrick Kasasa

Participatory plant breeding in Honduras: Past successes and future challenges 84 Marvin Gomez, Juan Carlos Rosas, Sally Humphries, José Jiménez, Paola Orellana, Carlos Ávila, Mérida Barahona, Fredy Sierra

Participatory crop improvement for promoting conservation and sustainable use of crop genetic resources in Nepal 97 Pitambar Shrestha

Foundation of sustainable food production: Experiences fromfarmer breeding in Southeast Asia110Normita G. Ignacio, Norminda P. Naluz

#### Part 2 Chinese cases

From participatory plant breeding to integrated rural development: The case of Upper Gula, Guangxi 129 Lanqiu Qin, Kaijian Huang

In situ conservation of farmers' seed systems: Smallholder farmers and scientists join forces to enhance conservation and sustainable use of traditional varieties 154 Milin Tian, Xin Song, Guanqi Li, Haimei Liang, Yanyan Zhang, Yufen Chuang

	The case of the Hani ethnic group of Yunnan: Community–based biodiversity management Yunyue Wang, Chunming Lu, Guangyu Han , Yifan Zhu, Bo Jiang, Ling Huang, Hongsong Wang , Xiang Li	172
	A case of conventional rice in the Guangxi Academy of Agricultural Sciences Rice Research Institute Chuanhua Chen	182
Conclusion	Trends and highlights: Seeds that continue to give Ronnie Vernooy, Yiching Song	191
Appendix	Selected key results of the PPB initiatives	200
Acknowledgement		205

#### 图书在版编目(CIP)数据

种子带来的生机.2,参与式选育种与乡村振兴 = Seeds that give revisited: Participatory plant breeding and rural revitalization:英文/宋一青, (荷) 罗尼・魏努力主编. 一北京:中国农业出版社, 2023.2

ISBN 978-7-109-29949-8

I.①种···· Ⅱ.①宋··· ②罗··· Ⅲ.①植物育种-英 文 Ⅳ.①S33

中国版本图书馆CIP数据核字(2022)第163053号

SEEDS THAT GIVE *REVISITED*: PARTICIPATORY PLANT BREEDING AND RURAL REVITALIZATION EDITORS-IN-CHIEF: Yiching Song, Ronnie Vernooy ASSOCIATE EDITORS-IN-CHIEF: Lanqiu Qin, Linxiu Zhang

PUBLISHED & DISTRIBUTED BY China Agriculture Press Co., Ltd 18 Maizidian Street, Chaoyang District, Beijing 100125, China Visit our website at www.ccap.com.cn Printed & bound in Zhong Nong Printing Co., Ltd

EDITORIAL OFFICE STAFF: Mingfeng Sun COPY EDITOR: Liting Wu DESIGNER: Jing Yang

Publishing Date: February, 2023 Edition: 1<sup>st</sup> edition, February, 2023 Print: 1<sup>st</sup> print, February, 2023 Size: 880mm × 1230mm 1/32 Printed sheet: 7 Insert: 8 Word count: 260 000 Price: CNY ¥ 78.00

No part of this book may be used or reproduced in any manner without written permission from the publisher, except in the context of reviews. Errors or omissions will be corrected in subsequent editions. Service Phone: 010–59195115 010–59194918