

Model Project On Improved Rice Mill

Rice in the Cambodian economy: past and present: Topography, climate, and rice production: Soils and rice: Rice-based farming systems: Rice ecosystems and varieties: Pest management in rice: Farm mechanization: Capture and culture ricefield fisheries in Cambodia: Constraints to rice production and strategies for improvement.

Rice consumption in Africa has increased dramatically over recent decades, growing faster than consumption of any other major staple on the continent. However, apart from Egypt, no African country is currently self-sufficient in terms of rice consumption. FAO implemented the project from May 2014 to December 2019, with the ten ministries of agriculture from the beneficiary countries. The project goal was to develop sustainable and productive rice systems in Africa to increase food security and reduce poverty. The project focused on increasing rice production, improving rice yield, and strengthening the rice value chain among smallholder farmers. South-South Cooperation was demonstrated to be an excellent mechanism for pooling resources and efforts in innovation and development processes. Sharing knowledge with decision makers and political consultation at the highest level was useful to reaffirm and update policies strategies and intervention priorities, and to mobilize partners from a large number of countries. Several producers, producer groups and communities successfully increased production, reducing post-harvest losses and improving quality of rice through the use of appropriate post-harvest management technologies and equipment.

The potential of community fish refuges (CFRs) in rice field agro-ecosystems for improving food and nutrition security in the Tonle Sap region

Rice Almanac

Findings from a Farm Investment Climate Assessment

Genetic Improvement of Rice for Water-limited Environments

Developments in the Asian Rice Economy

Promising practices in food security and nutrition assistance to vulnerable households in the Tonle Sap Region, Cambodia

The Future Rice Strategy for India presents forward-looking insights toward achieving sustainable development of the rice sector, ensuring future food and nutritional security. As a staple food for many in India, including the economically disadvantaged, there are many concerns that affect the development of rice sector. Facing issues from environmental demands to economic stagnation, access to food, food inflation, and the Food Security Act (demand - supply - distribution of rice) achieving sustainability in production and exports is an important and urgent challenge. Using case studies to illustrate existing and potential issues, challenges and solutions, The Future Rice Strategy for India presents key strategic options while considering the implicit consequences. In addition, the findings enrich the strategy and policy formulation considerations for the role of rice in the country. This multidisciplinary approach features the expertise of rice scientists covering different aspects of rice sector; from breeding to consumer preferences and markets and trade. Uses analysis based on agro ecological zones (AEZ) patterns providing understanding of future growth patterns based on rice ecologies Includes case studies with proposed solutions taking into consideration pros and cons of each, allowing readers facing similar concerns and issues to identify an appropriate solution more efficiently and effectively

This book features the latest research advances made in developing nitrogen-fixing rice.

Rice in West Africa

Patterns of Adoption of Improved Rice Varieties and Farm-level Impacts in Stress-prone Rainfed Areas in South Asia

Production and Quality Improvement

Rice Production in Cambodia

The Rice Economy of Asia

Public Expenditure and Sustainability of the Regional Agricultural Project Strategy

Describes some of the recent advances in the genetics and physiology of drought resistant rice varieties and the integration of highly efficient breeding and genetic analysis techniques with functional genomics. Harnessing recent scientific breakthroughs, Drought Frontiers Project is launched as a major assault on the problem of improving drought resistance in rice. Case studies are discussed to present perspectives on the various multidisciplinary facets of drought resistance in rice, along with the involvement of natural resource management practices and the socioeconomic implications that entail.

This book focuses on the conventional breeding approach, and on the latest high-throughput genomics tools and genetic engineering / biotechnological interventions used to improve rice quality. It is the first book to exclusively focus on rice as a major food crop and the application of genomics and genetic engineering approaches to achieve enhanced rice quality in terms of tolerance to

various abiotic stresses, resistance to biotic stresses, herbicide resistance, nutritional value, photosynthetic performance, nitrogen use efficiency, and grain yield. The range of topics is quite broad and exhaustive, making the book an essential reference guide for researchers and scientists around the globe who are working in the field of rice genomics and biotechnology. In addition,

It provides a road map for rice quality improvement that plant breeders and agriculturists can actively consult to achieve better crop production.

Rice Today, July-September, 2004, Vol. 3, No. 3

Source Book for the Most Important Economic Activity on Earth

Constraints to High Yields on Asian Rice Farms: An Interim Report

Impact of Rice Research

Drought Frontiers in Rice

Rice Research for Quality Improvement: Genomics and Genetic Engineering

Presenta data concerning rice and rice production around the world.

The fisheries sector in Cambodia contributes 8%-12% to national GDP and 25% - 30% to agricultural GDP, with an estimated 4.5 million people involved in fishing and associated trades. Fish and other aquatic animals are important food sources, contributing an estimated national average of 60% - 70% of total animal protein intake. Of the 2013 total fish production, 550,000 metric tons were harvested from freshwater habitats, of which rice field fisheries and small-scale family fisheries contributed approximately 20%. The productivity and value of rice field fisheries to households in rural Cambodia has been highlighted in a number of previous studies. The Fisheries Administration of the Ministry of Agriculture, Forestry and Fisheries plans to increase productivity from rice field fisheries and aquaculture at an annual rate of 15% to maintain supply for a growing population. This report draws mainly on the baseline and monitoring data from the Rice Field Fisheries Enhancement Project (RFFEP) during its implementation between 2012 and 2014. Reference is also made to the Fish on Farms project to highlight the relative contribution of fish from small-scale aquaculture compared to wild-caught fish.

New Directions : Proceedings of an International Symposium 31 January–3 February 1987, Rice Research and Training Center, Sakha, Egypt

A Study

Crop Improvement for Increased Rainfed Production

Rice Today Volume 6 Number 4

Improving Rice Production and Commercialization in Cambodia

The importance of rice as a world crops, and its principal characteristics. The modern rice plant and the new technology: Greater potentials for rice production in the tropics. Problems of postharvest technology. Rice marketing. Some successful rice production programs. Promising rice research. Elements of a successful accelerated rice production program. A national rice program: putting the ingredients together.

The CGIAR Research Program on Aquatic Agricultural Systems (AAS) seeks to reduce poverty and improve food security for many small-scale fishers and farmers who are dependent on aquatic agriculture systems by partnering with local, national and international partners to achieve large-scale development impact. This study on promising practices in food security and nutrition assistance to vulnerable households in the Tonle Sap region

forms part of the preliminary research that informs AAS work in the highly productive Mekong Delta and Tonle Sap Lake floodplain. The study aims to identify and learn from promising practices that have had a positive impact on the food security and nutrition of vulnerable households in the Tonle Sap region.ý

1794-1990

Agronomic Rice Practices and Postharvest Processing

Rice Farming Systems

Rice Improvement in China and Other Asian Countries

Analysis of Policy in Sierra Leone

Rice in the Tropics

Successful release of new and better crop varieties increasingly requires genomics and molecular biology. This volume presents basic information on plant molecular marker techniques from marker location up to gene cloning. The text includes a description of technical approaches in genome analysis such as comparison of marker systems, positional cloning, and array techniques in 19 crop plants. A special section focuses on converting this knowledge into general and specific breeding strategies to overcome biotic stress. Theory and practice of marker assisted selection for QTL, gene pyramiding and the future of MAS are summarized and discussed for maize, wheat, and soybean. Furthermore, approaches in silviculture on the examples of Fagus, Populus, Eucalyptus, Picea and Abies are presented. The volume ends with a comprehensive review of the patents relevant for using molecular markers and marker assisted selection.

Cambodia has a potential advantage in agricultural production due to significant amounts of fertile land and high levels of agricultural employment, but rice production and commercialization remain well below potential. This study uses a farm investment climate assessment to provide evidence on key areas where government investments and policy reforms can lead to higher levels of rice production and commercialization in small farms. Improving output markets through domestication of rice and other crops found to be related to increased production efficiency, commercialization, rice sold, and value of sales.

The Future Rice Strategy for India

Rice-fish Research and Development in Asia

Volume 1: Breeding Techniques and Abiotic Stress Tolerance

White Gold: The Commercialisation of Rice Farming in the Lower Mekong Basin

Collaborative Project between CIRAD-CA, CIAT and FLAT Rice Improvement

An integrated assessment

As the effects of climate change set in, and population and income growth exert increasing pressure on natural resources, food security is becoming a pressing challenge for countries worldwide. Awareness of these threats is critical to transforming concern into long-term planning, and modeling tools like the one used in the present study are beneficial for strategic support of decision making in the agricultural policy arena. The focus of this investigation is the Republic of Korea, where economic growth has resulted in large shifts in diet in recent decades, in parallel with a decline in both arable land and agricultural production, and a tripling of agricultural imports, compared to the early 2000s. Although these are recognized as traits of a rapidly growing economy, officials and experts in the country recognize that the trends expose the Republic of Korea to climate change shocks and fluctuations in the global food market. This study uses the IMPACT (International Model for Policy Analysis of Agricultural Commodities and Trade) economic model to investigate possible future trends of both domestic food production and dependence on food imports, as well as the effects from adoption of agricultural practices consistent with a climate change adaptation strategy. The goal is to help assess the prospects for sustaining improvements in food security and possibly inform the national debate on agricultural policy. Results show that historical trends of harvested area and imports may continue into the future under climate change. Although crop models suggest negative long-term impacts of climate change on rice yield in the Republic of Korea, the economic model simulations show that intrinsic productivity growth and market effects have the potential to limit the magnitude of losses: rice production and yield are projected to keep growing between 2010 and 2050, with a larger boost when adoption of improved technologies is taken into consideration. At the same time, food production and net exports from the country's major trading partners are also projected to increase, although diminished by climate change effects. In sum, these results show that kilocalorie availability will keep growing in the Republic of Korea, and although climate change may have some impact by reducing the overall availability, the effect does not appear strong enough to have significant consequences on projected trends of increasing food security.

This open access book is about understanding the processes involved in the transformation of smallholder rice farming in the Lower Mekong Basin from a low-yielding subsistence activity to one producing the surpluses needed for national self-sufficiency and a high-value export industry. For centuries, farmers in the Basin have regarded rice as ‘white gold’, reflecting its centrality to their food security and well-being. In the past four decades, rice has also become a commercial crop of great importance to Mekong farmers, augmenting but not replacing its role in securing their subsistence. This book is based on collaborative research to (a) compare the current situation and trajectories of rice farmers within and between different regions of the Lower Mekong, (b) explore the value chains linking rice farmers with new technologies and input and output markets within and across national borders, and (c) understand the changing role of government policies in facilitating the on-going evolution of commercial rice farming. An introductory section places the research in geographical and historical context. Four major sections deal in turn with studies of rice farming, value chains, and policies in Northeast Thailand, Central Laos, Southeastern Cambodia, and the Mekong Delta. The final section examines the implications for rice policy in the region as a whole.

The Quest for Nitrogen Fixation in Rice

Final evaluation of the project ‘Partnership for sustainable rice systems development in sub-Saharan Africa’

Annual Report

An Evaluation of the Impact of the Rice Agricultural Land Reform Settlement Project in Thailand

One World Or Several

Water-wise Rice Production

A history and analysis of the public enterprise sector of the Pakistani economy, examined at the macro and microeconomic levels. Due to the unique character of Pakistani development and the lack of any comparative framework for analysis, this is recommended only for scholarly collections in the field. index. Distributed by Westview. An assessment of government expenditure policy and its impact on the sustainability of the development measures initiated by regional agricultural projects in Sierra Leone. Discussion of the study's conceptual framework and research methodology is followed by eight chapters covering development of the agricultural sector over the last decade; sustaining farm-level benefits and the development process at the regional level; and implications and recommendations for domestic policy and external donor assistance. Numerous appendices. Lacks an Annotation copyright by Book News, Inc., Portland, OR

Contributed articles.

Molecular Marker Systems in Plant Breeding and Crop Improvement

International Rice Research Notes Vol 19 No 3

The Agency's Technical Co-operation Activities in ...

Annual Report to the President and to the Congress for Fiscal Year ...

IRRI Research Paper Series

World Bibliography of Rice Stem Borers

This volume addresses three important agricultural aspects of rice: physical characteristics, physico-chemical characteristics, and the organoleptic aspects. Divided into sections, the book first examines recent trends and advances for higher production and quality improvement, focusing on the effects of climate on rice cultivation and climate-resilient agricultural practices in rice. The volume goes on to cover nutrient management for rice production and quality improvement. Chapters also address weed management and postharvest processing practices for improved rice production. With chapters from renowned scientists, researchers, and professors, this book will be a useful reference for rice researchers working in the area of agronomic practices, postharvest processing, and quality improvement in rice.

The Rice Agricultural Land Reform Settlement Project (RALRSP) is the project that was undertaken in accordance with the Constitution of the Kingdom of Thailand, the government policy, and the policy of the Ministry of Agriculture and Cooperatives (MOAC). It has objectives to create balance and resilience to agricultural sector, to increase capacity of food and energy crops production, and to support new generation of farmers who are the agriculture students and those interested in farming. The project areas include RALRS in 12 provinces, such as RALRS in Chaloom Phra Kiat District, Nakhon Si Thammarat Province; RALRS in Phichai District, Aittaradit Province; RALRS in Chumphon Buri District, Surin Province; and RALRS in Ubon Ratchathani Province. The important activities of the project include infrastructure development, knowledge and technology support, market opportunity creation, and farmer group formation mechanism development.Since rice is an important economic crop for Thailand. And the preliminary project impact evaluation by the Centre for Project and Programme Evaluation (CPPE) employed only data of participating agricultural households from surveying by CPPE and measure the project impact simply by Input, Process, Output, Outcome Model (IPOO Model) that compare only simple statistics of the project result before and after implementing the project. Therefore, the project should be evaluate by employing data of non participating agricultural household from other source and measuring the project impact by other impact evaluation techniques that can show the real impact of the project. This evaluation has objectives to evaluate the impact of the project on land using efficiency, rice production efficiency, and net cash income from rice production. The scope of the evaluation includes 9 RALRSs that were established between 2010 and 2012. The data used include data of participating agricultural households from survey of CPPE and data of non participating agricultural households from Agricultural Household Socio Economics Survey (AHSES) of the Centre for Agricultural Information (CAI). The impact evaluation techniques used include the Propensity Score Matching (PSM) and the Difference in Differences Approach (DID).For the preliminary result of the project impact evaluation by CPPE, it shows that implementing 9 RALRSs did not affect the efficiency of land utilization.

However, it shows that implementing 9 RALRSs affect positively the efficiency of rice production and net cash income from rice production. After the project, agricultural households in 9 RALRSs could increase rice production on the average to 1,668.78 kilogram per Acre. And they received increased net cash income on the average to 261.30 Euro per Acre. For the result of this thesis, it also shows that implementing 9 RALRSs did not affect the land using efficiency. However, it shows that implementing 9 RALRSs and RALRS in the central and southern regions, especially improving canal system and providing services on machinery and marketing equipment, affect positively and negatively the rice production efficiency and net cash income. After the project, if agricultural households in RALRS in the central and southern regions benefit from improving canals system, their rice production efficiency and net cash income will be increased by 2,381.55 kilogram per Acre and 311.94 Euro per Acre respectively. While if they benefit from services on machinery and marketing equipment, their rice production efficiency will be decreased by 220.03 kilogram per Acre. For agricultural households in 9 RALRSs, if they benefit from improving canals system, their net cash income will be increased by 260.16 Euro per Acre.From these results of the project impact evaluation, implementing the project and a similar project in the future the responsible agencies should undertake the following:1. Continuing canal systems improvement in successful areas, and applying the improvement in a similar project in order to ensuring agricultural households can access to water sources for cultivating rice by undertaking, such as dredging canals, and constructing and repairing electric pumping station.2. Finishing the project implementations that did not affect increase in rice production efficiency and net cash income, such as providing training on rice cultivation, distributing material for soil improvement, and providing services on machinery and marketing equipment, and use remaining budget of these activities to do activities on improving the canal systems.3. Improving those unaffected implementations in order for agricultural households to fully benefit from these implementations by undertaking, such as organizing training on rice cultivation only on the topics that agricultural households are interested in and distributing material for soil improvement to agricultural households before cropping season.

Improving the livelihood of farmers by intensifying the rice-potato-rice system through double-transplanting of rice in West Bengal,India

Rice Today Volume 6 Number 2

Climate change, agriculture, and adaptation in the Republic of Korea to 2050

A Guide to the Development of National Programs

Men and Women Together Towards Growth, Sustainability & Solidarity in the 1990s