



UNIVERSITI PUTRA MALAYSIA

**INTEGRATING ROOT CROP RESEARCH AND EXTENSION
FOR SUBSISTENCE HOUSEHOLDS IN THE
PHILIPPINES: AN INDEPTH INQUIRY**

PERFECTO URDANETA BARTOLINI

FPP 1999 75

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By

PERFECTO URDANETA BARTOLINI

**Thesis Submitted in Partial Fulfilment of the
Requirements for the Degree of Doctor of Philosophy
in the Faculty of Educational Studies
Universiti Putra Malaysia**

March 1999



DEDICATION

For Carla Evelyn

This piece of work is dedicated.



ACKNOWLEDGEMENTS

I'd be remiss in my duties if I would fail to express my indebtedness to the following people, institutions, friends and families whose kind support and help made the actual realisation of this piece of work possible:

The International Development Research Centre (IDRC) Ottawa, Canada for providing the scholarship grant to complete my doctoral studies. Specifically to Dr. Anne K. Bernard, Dr. Pedro V. Flores, Miss June Tan and the Programme Officers and staff of IDRC, Singapore, who were all very instrumental in providing assistance.

The Visayas State College of Agriculture (ViSCA) through the Scholarship Committee and my home office unit, the Philippine Root Crop Research and Training Centre through Dr. Manuel K. Palomar, for granting my leave and approval of my studies.



My thesis supervisory committee: Assoc. Prof. Dr. Hj. Azimi Hj. Hamzah, major supervisor; and members, Assoc. Prof. Dr. Saidin Teh, Dr. Md. Salleh Hj Hassan and Dr. Raja Ahmad Tajuddin Abdul Rashid Sha for their kind support, assistance and expert guidance in accomplishing this work to its final form.

My indebtedness to Prof. Dr. Alang Perang Abdul Rahman Zainuddin and Assoc. Prof. Dr. Rahim Md. Sail for some insights in my research topic.

The staff of the Faculty of Educational Studies who were always ready to extend a helping hand in times of my predicament and need of assistance: Centre Director and Assoc. Prof. Dato' Dr. Mohd. Nasir Ismail, Mrs. Junainah A. Manan and Mrs. Fatimah Sham Binte Saad.

All my beloved friends whose sincere assistance and encouragement made my life bearable and enduring through difficulties.



Mr. Paul and Mrs. Enya Concepcion Manalo and children who afforded me the comforts of home away from home and whose generosity sparked my enthusiasm to persevere in my work. My indebtedness to Mr. Paul Manalo for editing my manuscript.

My steadfast friends: Linda A. Lumayag, Nerissa D. Salayo, Zenaida R. Reyes and Juan D. Albaladejo, whose beautiful friendship, fun and togetherness helped me overcome my extreme boredom.

My wife Evelyn, whose love, patience and understanding has given me courage and strong determination to pursue this dream.

My children, Imelda and Perfecto, Jr. who are always my joy and constant inspiration to go on this life's journey.



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LIST OF ABBREVIATIONS

ESCAAS	-	<i>Eastern State College of Agriculture and Applied Sciences</i>
RCRI	-	<i>Root Crop Research Institute</i>
RC-ISC	-	<i>Root Crop Information Centre</i>
AT	-	<i>Agricultural Technician</i>
BAR	-	<i>Bureau of Agricultural Research</i>
BARC	-	<i><u>Barangay</u> Agrarian Reform Officer</i>
CARL	-	<i>Comprehensive Agrarian Reform Law</i>
CARP	-	<i>Comprehensive Agrarian Reform Programme</i>
CIAT	-	<i>Centro Internacional de Agricultura Tropical</i>
CLOA	-	<i>Certificate of Land Owner Award</i>
CIP	-	<i>Centro Internacional de la Papa</i>
CO	-	<i>Community Organiser</i>
DA	-	<i>Department of Agriculture</i>
DAR	-	<i>Department of Agrarian Reform</i>
DBP	-	<i>Development Bank of the Philippines</i>
DOLE	-	<i>Department of Labour and Employment</i>
DTI	-	<i>Department of Trade and Industry</i>
EP	-	<i>Emancipation Patent</i>



FA	-	Farmers Association
FAO	-	Food and Agriculture Organisation
IDRC	-	International Development Research Centre
IRCP	-	Integrated Root Crop Programme
MAO	-	Municipal Agricultural Officer
MARO	-	Municipal Agrarian Reform Officer
NPA	-	New Peoples' Army
OFR	-	On-Farm Research
PCT	-	Programme Core Officer
PIT	-	Project Implementation Team
PMC	-	Programme Management Committee
PAGASA	-	Philippine Atmospheric Geophysical Astronomic Services Administration
PAO	-	Provincial Agricultural Officer
RC-FAC	-	Root Crop Farmers Advisory Council
SALT	-	Sloping Agricultural Land Technology
UPLB	-	University of the Philippines at Los Banos



Abstract of thesis presented to the Senate of the
Universiti Putra Malaysia in partial fulfillment of
the requirements for the degree of Doctor of
Philosophy.

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By

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March 1999

Chairman: Assoc. Prof. Dr. Hj. Azimi Hj. Hamzah

Faculty: Educational Studies

The establishment of the Root Crop Research Institute (RCRI) at Eastern State College of Agriculture and Applied Sciences (ESCAAS), at Bucgay, Lemar Province (All names of persons, places and institutions in italics are fictitious.) triggered the impetus for root crop research and extension. The major programme of RCRI is the Integrated Root Crop Programme (IRCP). This study focused on the IRCP's operations, functions, processes and consequences as an integrated research and extension programme for the subsistence farmers and their households in the



Philippines. The methodological approaches employed were indepth interviews, document analysis and participant observation under the umbrella of qualitative research.

The study revealed that the researchers and project implementers of IRCP faced the dilemma and confusion on how to operate a large scale integrated project that consist of four programmes, 11 projects and 32 studies. Integration was found to be effective in management but there was a shortfall in the interaction among researchers, extension workers and farmers. However, they did experience a form of teamwork. The findings indicated that there was an attempted linkage among projects, staff and institutions. The linkage between the Department of Agriculture and IRCP was not fully realised. The respondents perceived an autocratic leadership style as a weakness in management. The components/elements in IRCP was found to fall short of their expected outcomes.



The pilot barangays (villages) at Palembang, Saram were not appropriate for sweet potato technology transfer because the farmers were gabi (taro) and cassava growers. Although, IRCP embarked on vigorous root crop technology transfer strategies but the subsistence farmers were reluctant to adopt these technologies. Subsistence farmers planted watermelons instead because of high income. All the farmers associations were engaged in sari-sari (variety) stores because these were profitable.

Among the major conclusions are: (1) a compartmentalised research system hampers integration; (2) accommodating more projects and researchers expanded the programme and gave rise to competition of resources; (3) integration was partial and incomplete; (4) IRCP's strength is teamwork; (5) the lack of organisational mechanism for check and balance in management fosters an autocratic style of management; (6) programme components/elements have achieved shortfalls vis-a-vis specific objectives; (7) subsistence farmers adopt a technology that will increase their income; and (8) members of farmers



associations tended to be suspicious to fellow farmers and even to outsiders.

The study recommends a modified Integrated Root Crop Research and Extension model with a unified focus and goal.



Abstrak tesis yang dikemukakan kepada Senat Universiti
Putra Malaysia sebagai memenuhi syarat untuk
memperolehi Ijazah Doktor Falsafah

**PENYELIDIKAN DAN PENGEMBANGAN BERSEPADU BAGI
TANAMAN RENEK UNTUK KELUARGA MISKIN DI
FILIPINA: SATU PENELITIAN TERPERINCI**

Oleh

PERFECTO U. BARTOLINI

Mac 1999

Pengerusi: Prof. Madya Dr. Haji Azimi Haji Hamzah

Fakulti: Pengajian Pendidikan

Penubuhan *Root Crop Research Institute (ICRI)* di *Eastern State College of Agriculture and Applied Sciences (ESCAAS)*, di *Bucgay, Lemar Province* (semua nama responden, tempat dan institusi dalam bentuk italik adalah rekaan) menjadi penggerak kepada kegiatan penyelidikan dan pengembangan teknologi tanaman berumbi di Filipina. Program utama RCRI ialah *Integrated Root Crop Programme (IRCP)*. Kajian ini memberi tumpuan terhadap operasi IRCP, fungsi, proses dan kesan sebagai program pengembangan dan penyelidikan yang bersepadu untuk petani sara hidup di

