

CENTRAL LUZON STATE UNIVERSITY TRAINING ON AGROFORESTRY,  
LIVELIHOOD PROJECTS, AND COOPERATIVE DEVELOPMENT  
FOR THE BUGKALOTS IN THE CASECNAN PROJECT-  
PHILIPPINES: AN EVALUATION

EMMANUEL WOLLOR TOPOR II

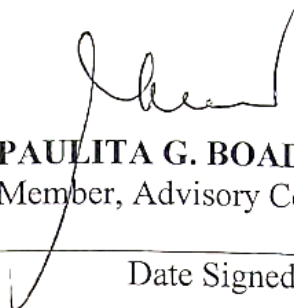
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A thesis submitted to the faculty of the Institute of Graduate Studies,  
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Nueva Ecija, Philippines in partial fulfillment  
of the requirements for the degree of


MASTER OF SCIENCE  
(Rural Development)

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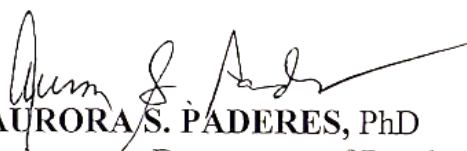
This thesis entitled, **CENTRAL LUZON STATE UNIVERSITY TRAINING ON AGROFORESTRY, LIVELIHOOD PROJECTS, AND COOPERATIVE DEVELOPMENT FOR THE BUGKALOTS IN THE CASECNAN PROJECT-PHILIPPINES: AN EVALUATION** prepared and submitted by **EMMANUEL WOLLOR TOPOR II** in partial fulfillment of the requirements for the degree **MASTER OF SCIENCE (RURAL DEVELOPMENT)**, is hereby accepted.

  
**PAULITA G. BOADO, EdD**  
Member, Advisory Committee  
\_\_\_\_\_  
Date Signed

  
**TEODORA T. BATTAD, PhD**  
Member, Advisory Committee  
\_\_\_\_\_  
Date Signed

  
**FLOR AMOR B. MONTA, PhD**  
Chairperson, Advisory Committee  
\_\_\_\_\_  
Date Signed

Accepted as partial fulfillment of the requirements for the degree **MASTER OF SCIENCE (RURAL DEVELOPMENT)**.

  
**AURORA S. PADERES, PhD**  
Chairperson, Department of Rural  
Development and Communication  
\_\_\_\_\_  
Date Signed

  
**JOSUE A. TRABAGON, PhD**  
Dean  
\_\_\_\_\_  
Date Signed

## BIOGRAPHICAL SKETCH

The researcher, Emmanuel Wollor Topor, was born to Mr. Topor Sikankon and Ms. Bortieh Nmahtendi. He completed his elementary and secondary education at the St. Francis School, Pleebo, Maryland County, Liberia, in 1977. He then enrolled at the University of Liberia, where he completed his bachelors degree in agriculture in 1983.

As a student, the author worked as a cadet at the Public Affairs Bureau, Ministry of Information and Cultural Affairs and Tourism, Republic of Liberia from 1980-1983. In 1984, he was employed by the German Leprosy Relief Association (DAHW) of Wurzburg, Germany to serve as the Coordinator of Leprosy Agricultural Rehabilitation Program at the Ministry of Health and Social Welfare, Republic of Liberia until 1990. Working with the leprosy “clients”, he saw the plight of the less fortunate people who are terms discriminated as the result of their situation. Since then, he vowed to serve them in any corner of the globe through socio-economic reintegration.

He fled his native land due to the civil conflict. While in Ghana, being a development worker, he envisaged to fulfill his mission to the downtrodden. He organized the community for development action at the refugee camp and founded the HELP-Society. He served as the coordinator for HELP-Society from 1991 to 2000. The work of HELP in Ghana has a lasting impact on the Liberians in Ghana. This is seen in the records of the UN HCR and other humanitarian organizations worldwide that are partners of the Society.

The author was fortunate to have been affiliated with a few organizations. These are: President Federation of Liberian Youth, Maryland County Branch from 1973 to

1975; the Society for the Conservation of Nature of Liberia; the Westpoint Urban Cooperative, Liberia; CHA-Liberia; and Voluntary Workcamp of Ghana (VOLU); and Tools For Self-Reliance, UK.

He also attended some development courses, seminars, and workshops. Among these were the Community Development Course, Golda Meir International Training Center, Haifa, Israel; Rural Development Management, James Y. Yen International Institute of Rural Reconstruction, Cavite, Philippines; the Cutting Edge Conference, UK; Observational tours of Tools For Self-Reliance, UK; the Mobile Oral Health Program, University of Westwaterand, South Africa; German Leprosy Relief Association (DAHAW) Fund Raising Meeting for Liberia, Wurburg, Germany; Workcamps of VOLU; and the preparation of Agroforestry in Ghana Kit, Aburi, Ghana.

The author was awarded the Prince Bernhard Scholarship of the World Wide Fund for Nature, Gland, Switzerland. This afforded him a partial sponsorship to pursue a masters degree at the Central Luzon State University, Science City of Muñoz, Philippines in 1999. He was also awarded the International Tropical Timber Organization Fellowship, Yokohama, Japan in 1995. At this time, he attended a rural development management course at the International Institute of Rural Reconstruction at Cavite City, Philippines.

He is a Roman Catholic, and is happily married to the former Miss Siedi “Dusy” Bedell, with whom he has two children, Bergdoll B. Topor and Annabel K. Topor. His family lives in Silver Spring, Maryland, United States of America.

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To his dearest and beloved wife, he says "hat off Dusy"; for all the support she gives him, without which his quest of higher education would have been much more difficult; and to his kids, Karlieh Nmahtendi Wollor Bortieh and Karlieh Topor Wollor Karlieh, for their understanding and for compromising their fatherly guidance for a long time. He is indebted to Mr. and Mrs. John Woods for their patience and the parental love given his family while he is pursuing his studies.

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He is extremely grateful to the Casecnan Social Multi-purpose Task Force Secretariat for allowing him to conduct his research within the Project Impact Zone. Also, he is very much appreciative to Dr. Kennedy N. Igbokwe and Dr. and Mrs. William Y.K Brown, who ably scouted and finalized his enrollment in this prestigious institution, the Central Luzon State University.

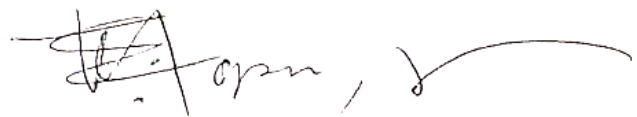
He is exceedingly gratified, encouraged and strengthened by the unflinching support of the following relatives and personalities, Dr. Patrick Sewulu Topor, MD, Councilor Samuel Kofi Woods, Mr. Michael D. Swen, Dr. Thomas Jaye, Dr. D. Nmah Tarpeh, Dr. Moses M. Zinnah, Mr. Detlef Mehnert, Comrade Momo Lamina, Mr. Siapha Kamara, and the late Councilor Francis N. Topor, Mr. Daniel D. Swen, Mr. Thomas Kofi, Mr. Abraham Blamo Walters and Dr. Jurgen Falski; and to the departed he mourns, and prays that by the grace of our Merciful Loving God, their souls have found sweet repose in ethereal fields of blissful rest.

Special mention is due the International Tropical Timber Organization, Yokohama, Japan for the opportunity afforded the author to attend the management course in rural development at the International Institute of Rural Reconstruction at Cavite City, Philippines. This sparked his interest to study; and to some extent helped him gain his human dignity.

To his parents and family members, he highly recognizes and appreciates their prayers and patience especially during these difficult times of our national history. The role of a kin is important for the survival of the family, but yet this was tolerated if only to pursue higher education level.

To those who, in one way or the other, have helped this author in his struggle but were inadvertently omitted, are also gratefully acknowledged.

To all Liberians, he wholeheartedly dedicates this work with affection, yearning for the restoration of peace and love, and synergy in our beloved homeland. Liberians! Let us stop this “cocojumuko”. It does not augur well in this present age which demands disciplinary and practical divisions of labor in nation building based on ideas, social justice, diplomacy and economic measures. Armed struggle has resulted in human suffering that encompasses our “Glorious Land of Liberty”. God bless our Motherland-Liberia!

A handwritten signature in black ink, appearing to read 'Emmanuel Wollor Topor II', with a long, sweeping flourish extending to the right.

**EMMANUEL WOLLOR TOPOR II**

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## ABSTRACT

**TOPOR II, EMMANUEL WOLLOR** Institute of Graduate Studies, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, August 8, 2002, **CENTRAL LIZON STATE UNIVERSITY TRAINING ON AGROFORESTRY, LIVELIHOOD PROJECTS, AND COOPERATIVE DEVELOPMENT FOR THE BUGKALOTS IN THE CASECNAN PROJECT-PHILIPPINES: AN EVALUATION.**

Adviser: **FLOR AMOR B. MONTA, PhD**

This study evaluated the CLSU training in agroforestry, livelihood projects and cooperative development for the Bugkalots in the Casecnan Project. Specifically, the study determined the extent the acquired skills were utilized by the trainees' households, and the level of food production and income. Five barangays in the PIZ were involved in the study chosen through random sampling techniques. The same method was used to determine the sample 53 respondents. The data were collected by interviewing the trainee-respondents.

The Statistical Package for Social Sciences was used to analyze the data. Pearson's Product Moment Correlation Coefficient and multiple regression were utilized to determine the relationship of variables. The levels of significance were placed at 0.01 and 0.05.

The findings on the socio-demographic profile were significant. Age had positive and highly significant association ( $r = 0.3712$ ) with food production and a highly significant influence ( $R^2 = 2.808$ ) on income. Similarly, educational attainment ( $\bar{x} = 6.49$  years) reflected highly significant correlation ( $r = 0.5097$ ) with income level and

was a significant determinant of agroforestry skills ( $R^2 = 2.0236$ ). Also, educational attainment reflected a highly significant influence ( $R^2 = 4.2100$ ) on income. Household size with a range of 2 - 13 and a mean of six members significantly influenced ( $R^2 = 2.2739$ ) agroforestry skills.

In terms of the training characteristics, almost all the 19 facilitators during the training were CLSU staff with qualifications ranging from certificates to doctor studies. The resource person's instructional qualities were generally rated 4.28 (very good). The training topics was rated 4.09 (useful) for productive work.

The four pre-set training objectives were generally perceived "relevant", (3.24) to trainees' needs and aspirations. Training objectives had positive and significant relationship ( $r = 0.2987$ ) with cooperatives although these had a negative but significant correlation ( $r = -0.2618$ ) with income. Training objectives were the significant determinant of cooperatives ( $R^2 = 2.2107$ ).

The farmlands of the respondents are their ancestral domain although the delineation of the farmland is "still in process". Farm size ranged from 0.25 hectare to 3 hectares that had a highly significant difference t-value of 3.59 at 0.01 percent before and after the training. Farming practice was slash and burn perceived as "about right" (2.72). Cropping schemes had highly significant difference at a t-value of 2.58 at 0.01 percent in terms of yield before and after the training.

The extent of adoption in agroforestry was rated "moderate" (3.06). It showed a positive and highly significant association ( $r = 0.3717$ ) with income. The knowledge on rattan production and manufacture was rated "moderately low" (2.32). All the households formed and participated in the cooperative activities. Cooperative development was rated

2.63 described as “moderate”. The need for further training was raised in “managing small business” and “leadership”.

The mean of P21.752.26 was found in total food production after the training. The mean significant difference before and after the training was 7.78. Also, income level had a highly significant difference (t-value 8.08).

Overall, the training teaching techniques employed in the training process were rated “effective” (3.94). This finding was supported by a significant influence ( $R^2 = 2.1182$ ) of training techniques/materials on cooperative activities.

Hindrances in adopting the technology for food production and increasing income were “unclear land rights”, “irregular visit” of extensionists, “lack of input/capital”, “lack of irrigation”, “inadequate skills”, “less information”, “lack of tools and machines”. Possible solutions identified by the respondents were continuous relevant training, access to credit, regular visit of extensionists and technical assistance to the barangays.

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