



PROCEEDINGS OF
The IRES
INTERNATIONAL CONFERENCE



ate: 16th -17th February, 2018 | Venue: Zurich, Switzerland

In Association With



PROCEEDINGS OF
THE IRES
103rd INTERNATIONAL CONFERENCE
ZURICH, SWITZERLAND

Organized by



Date of Event

16th-17th February 2018

Event Co-Sponsored by



Corporate Address

Institute of Research and Journals

Plot No- 161, Dharma Vihar, Khandagiri, Bhubaneswar, Odisha, India

Mail: info@theires.org, www.iraj.in

Publisher: **IRAJ**

© 2018, The IRES International Conference, Zurich, Switzerland

No part of this book can be reproduced in any form or by any means without prior written permission of the publisher.

Type set & printed by:

R. K Printers
Bhubaneswar, India

About IRAJ Research Forum (IRF):

The *IRAJ Research Forum* is an International non-profit academic association under 'Peoples Empowerment Trust' with the stated goals of promoting cooperation among scientists, defending scientific freedom, encouraging scientific responsibility, and supporting scientific education and science outreach for the betterment of all humanity. It is the one of the world's largest and most prestigious general scientific society.

Objective of IRF:

- ❖ To provide a world class platform to researchers to share the research findings by organizing International/National Conferences.
- ❖ To use the research output of the conference in the class room for the benefits of the students.
- ❖ To encourage researchers to identify significant research issues in identified areas, in the field of Science, Engineering, Technology and Management.
- ❖ To help dissemination of their work through publications in a journal or in the form of conference proceedings or books.
- ❖ To help them in getting feedback on their research work for improving the same and making them more relevant and meaningful, through collective efforts.
- ❖ To encourage regional and international communication and collaboration; promote professional interaction and lifelong learning; recognize outstanding contributions of individuals and organizations; encourage scholar researchers to pursue studies and careers in circuit branches and its applications.
- ❖ To set up, establish, maintain and manage centers of excellence for the study of /on related subjects and discipline and also to run self supporting projects for the benefit of needy persons, irrespective of their caste, creed or religion.

About TheIRES:

The Institute of Research Engineers and Scientists (TheIRES) is a **non-profit organization** that promotes the Engineering and Technology, related latest developments and issues to be discussed and experimented through interactions amongst the researchers and academician across the globe at a common platform in association with The IIER, Academics World & ISER.

Conference Committee

Program Chair:

Dr. P. Suresh

M.E, Ph.D. Professor and Controller of Examinations,
Karpagam College of Engineering.,
Coimbatore, India

Hani N Hermiz

Agricultural College University of Salahaddin,
Erbil.

Conference Manager:

Mr. Bijan Kumar Barik

Mob: +91-9776047497

Conference Convener:

Miss. Priyanka Yadav, TheIRES

Mob: +91-7809593053

Publication Head:

Mr. Manas Ranjan Prusty, IRAJ, India

INTERNATIONAL ADVISORY MEMBERS

Prof. Goodarz Ahmadi,

Professor, Mechanical and Aeronautical Engineering,
Clarkson University, USA

Dr Chi Hieu Le,

Senior Lecturer, University of Greenwich. Kent ME4 4TB.
United Kingdom

PROF. (ER.) Anand Nayyar

Department of Computer Applications & I.T.KCL Institute of Management and Technology, Jalandhar
G.T. Road, Jalandhar-144001,Punjab, India.

Prof. R. M. Khair,

Professor, Dept. Of Elex. and Telecommunication,
B, V University, India

Dr. P. Suresh,

Professor, Karpagam College of Engineering, Coimbatore,Tamilnadu

Mark Leeson

Associate Professor (Reader)
Area of Expertise: nanoscale communications,
evolutionary algorithms, network coding and communication systems

Dr. P. K. Agarwal

Professor, Deptt. of Civil Engineering, MANIT Bhopal ,Ph. D: IIT Kanpur
M.E: Civil Engg.IIT Roorkee, Membership: Indian Road Congress (IRC), Institute of Urban Transport (IUT)

Shahriar Shahbazpanahi

Islamic Azad University, Department of Civil Engineering, Sanandaj, Kurdistan, Iran,
PhD (Structural Engineering),
University Putra Malaysia, Malaysia, 2009-Present

Harun Bin Sarip

Head of Research and InnovationDept, UniKL-MICET
Doctorate: Université de La Rochelle, France, Member:
International Society of Pharmaceutical Engineer, Singapore Chapter

Dr.Bilal Ali Yaseen Al-Nassar

The World Islamic Sciences and Education University (WISE)
Faculty of Business and Finance
Department of Management, Information System (MIS), Amman- Jordan

Dr. Md. Al-Amin Bhuiyan
Associate Professor
Dept. of Computer Engineering
King Faisal University
Al Ahssa 31982, Saudi Arabia

Prof. (Er.) Anand nayar
Department of Computer Applications & I.T.
KCL Institute of Management and Technology, Jalandhar
G.T. Road, Jalandhar-144001
Punjab, India

Prof. Aleksandr Cariow
institution or Company: West Pomeranian University of
Technology, Szczecin

Dr. P. K. Agarwal
Professor, Deptt. of Civil Engineering, MANIT Bhopal ,Ph. D: IIT Kanpur
M.E: Civil Engg.IIT Roorkee, Membership: Indian Road Congress (IRC), Institute of Urban Transport (IUT)

Dr. VPS Naidu
Principal Scientist & Assoc. Prof., MSDF Lab, FMCD
CSIR - National Aerospace Laboratories, Bangalore, India

Mr. P. Sita Rama Reddy
Chief Scientist ,Mineral Processing Department, CSIR - Institute of Minerals & Materials Technology
Bhubaneswar, India, M.Tech. (Chem. Engg., IIT, KGP)

Dr.P.C.Srikanth,
Professor & Head, E&C Dept, Malnad College of Engineering, Karnataka
Senior Member IEEE, Secretary IEEE Photonics Society,
M.Tech: IIT, Kanpur, Ph.D: In IISc Photonics lab

Prof. Lalit Kumar Awasthi,
Professor, Department of Computer Science & Engineering
National Institute of Technology(NIT-Hamirpur),
PhD, IIT, Roorkee, M. Tech, IIT, Delhi

Dr. Chandra Mohan V.P.
Assistant Professor, Dept. of Mech. Engg., NIT Warangal,
Warangal. Ph.D : Indian Institute of Technology(IIT),Delhi
M.B.A: Alagappa University

Prof. I.Suneetha,
Associate Professor, Dept. of ECE, AITS, Tirupati, India

Dr.s. Chandra Mohan Reddy,
Assistant Professor (SG) & Head,Dept. of Electronics & Communication Engineering, JNTUA College of Engineering, Pulivendula,
Ph.D,J.N.T. University Anantapur, Anantapuramu

Gurudatt Anil Kulkarni,
I/C HOD E&TC Department, MARATHWADA MITRA MANDAL'S POLYTECHNIC

★★★

12. **The Students' Expectations to Bachelor of Public Administration Program, Faculty of Humanities and Social Sciences, SuanSunandhaRajabhat University** 49-54
 - *Marndarath Suksanga, Chindalak Vadhanasindhu, Juneerut Jannit, Yongyuth Kidsuntad*

13. **The Knowledge and Understanding about the Citizen politics :A case study of SuanSunandhaRajabhat University students** 55-57
 - *Marthinee Khongsatid*

14. **Generation Y's idea on Marriage specific case on Educational level** 58-61
 - *Monthakant Rodklai*

15. **Spatial Mobility of Myanmar Workers in Pineapple Processing Industry** 62-65
 - *Musthaya Patchanee, Nipon Sasithornsavapa, Suwaree Yordchim, Buabuttri Siritwat*

16. **The Impact of Tourism on local community following the case study of Wat Siri Phutto (Khamchanod), Ban Dung, Udon Thani** 66-70
 - *Nachawon Tonthaphimtong*

17. **The Boworadet Rebellion, 1933** 71-74
 - *Nattapoll Chaiching*

18. **The Empirical Study on Instructors' Acceptance and Use Interactive Book in Digital Learning Environment** 75-79
 - *Nutthapat Kaewrattanapat, Jarumon Nookhong, Wipada Chiawchan*

19. **Solid Waste as a Sustainable Source of Energy** 80-83
 - *Paraneesrikaew*

20. **Students' Perceptions Towards the Improvement of English Skills Through Researching Target Needs Analysis** 84-87
 - *Pathitta Akkarathanakul, Angvarrah Lieungnapar, Chinchira Bunchutrakun, Chantimawangsomchok, Anantachai Aeka*

21. **Survey of the Human Resource Management Knowledge Local Administrative Organization in Thailand** 88-90
 - *Phichak Phutrakhul*

22. **The Study on Elderly Tourist Requirement on Accommodation and Facility in Ranong Province** 91-94
 - *Pornnapat Berndt*

23. **The Recovery of Folk Medical Healer's Local Knowledge to Combine with the Treatment of Snake Bite Wounds: A Case Study of Prom Lok Temple, Promkiree District, Nakorn Sri Thammarat Province, Thailand** 95-99
 - *Saowapa Phaithayawat, Yaninie Phaithayawat, Suwaree Yodchim*

EDITORIAL

It is my proud privilege to welcome you all to the TheIRES International Conference at Zurich, Switzerland. I am happy to see the papers from all part of the world and some of the best paper published in this proceedings. This proceeding brings out the various Research papers from diverse areas of Science, Engineering, Technology and Management. This platform is intended to provide a platform for researchers, educators and professionals to present their discoveries and innovative practice and to explore future trends and applications in the field Science and Engineering. However, this conference will also provide a forum for dissemination of knowledge on both theoretical and applied research on the above said area with an ultimate aim to bridge the gap between these coherent disciplines of knowledge. Thus the forum accelerates the trend of development of technology for next generation. Our goal is to make the Conference proceedings useful and interesting to audiences involved in research in these areas, as well as to those involved in design, implementation and operation, to achieve the goal.

I once again give thanks to the Institute of Research and Journals, TheIIR, TheIRES for organizing this event in Zurich, Switzerland. I am sure the contributions by the authors shall add value to the research community. I also thank all the International Advisory members and Reviewers for making this event a Successful one.

Editor-In-Chief

Dr. P. Suresh

M.E, Ph.D. Professor and Controller of Examinations,
Karpagam College of Engineering.,
Coimbatore, India



SPATIAL MOBILITY OF MYANMAR WORKERS IN PINEAPPLE PROCESSING INDUSTRY

¹MUSTHAYA PATCHANEE, ²NIPON SASITHORNSAOVAPA, ³SUWAREE YORDCHIM,
⁴BUABUTTRI SIRIWAT

^{1,2,3,4}Suan Sunandha Rajabhat University, Bangkok Thailand

E-mail: ¹musthaya.pa@ssru.ac.th, ²nipon.sa@ssru.ac.th, ³suwaree.yo@ssru.ac.th, ⁴buabuttri.si@ssru.ac.th

Abstract - The aim of this research is to study potential factors relating to the spatial mobility of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan Province by 336 samples were analyzed. It was found that the former residence of Burmese migrant workers in the pineapple processing industry. The majority of them live in Myeik (95 people) =28.27 percent, live in Taninthayi (82 people) =24.40 percent. There are 64 inhabitants in Victoria Point =19.05 percent. There are 50 people living in Dawei =14.88 percent. Rangoon, 27 people=8.04%, and 18% or 5.36% of the province of Bokpyin. The majority of them are female, of 203 persons=60.4%. 133 males =39.6%. Most of them are between 25-50 years of age. Most of them have worked in Thailand for no more than 2 years, have single status and mostly graduated low elementary. There are a number of members in the family with 1-3 members. All Burmese migrants have no land in Prachuap Khiri Khan. But most of them have land in their native Burma. There are 148 people or 44% of the land. Between 1 and 5 Rais of land are less than 1 Rai, accounting for 32.7% and more than 5 Rais, of which 78 people or 23.2%. Monthly family debt of 1-2000 baht Analysis of Factors Influencing Regional Movement of Burmese Workers in pineapple processing industry, Prachuap Khiri Khan Province. Researchers have used statistical techniques to analyze. Cluster Analysis, Non-hierarchical cluster analysis (sometimes called K-Means Cluster Analysis), found that the displacement of Burmese workers in pineapple processing industry area was Cluster I, 42.86%, and Cluster II was 57.14%. Most of the migrants were Type A migrants who did not change their domicile. While Category B Include those with seasonal movements and temporary workers, so these movements are considered Circulation, most of which includes moving. Especially short time and repeatedly, it does not explicitly state whether it is permanent or temporary.

Index Terms - Spatial mobility, Myanmar workers and Pineapple Processing Industry.

I. INTRODUCTION

Soil condition in PrachuapKhiri Khan province is most suitable for growing crops, followed by the perennial plant, farming, vegetables, flower, and herbs, respectively. However, the geographical location of PrachuapKhiri Khan is very long. Therefore, various areas of the province are different in temperature and humidity, namely there is less rain and humidity in HuaHin and Kuiburi districts than MueangPrachuapKhiri Khan district and Bang SaphanNoi district. Therefore, there is a difference in the plant types as the saying "farming crops in the north, fruit trees in the south".

Pineapple is an important economic crop and ranked the no.1 income maker in the province resulting in the PrachuapKhiri Khan province being no.1 with the highest production and export volume in the world i.e. the cultivated area being 509,231 Rai, harvesting area being 248,378 Rai, the yield being about 1.06 million tons per year, and pineapple growers being 12,406 households. There have been 8,000 registered pineapple farmers and 137 groups. The production quality management system is according to GAP and 6,492 plots have received Q GAP certificate.[1] 80 percent of the yield are sent to processing plants for exportation. Therefore, there were as high as 34 pineapple processing plants and 4 agricultural processing plants for exportation established. The processed pineapple export markets, be it canned pineapple, canned pineapple juice, concentrated

pineapple juice, preserved and dried pineapple, and other processed agricultural yields would be futures trading (orders would be pre-order). This results in the establishment to accelerate production to meet the needs of the market. The raw materials used in processing agricultural products are easily perishable so production must be made in time before the raw material becomes rotten. Therefore, there is a high demands for labor to produce the production being on time and market demand.

One of the major problems associated with industrial workers in pineapple processing industry is "problems of seasonal labor" that has been directly impacted by the problem of higher production than demand early in the year, i.e. almost every year and the shortage of raw materials during July - August of each year. During the shortage of raw materials, employers would choose to reduce costs by reducing work hours and days. The working hour reduction at the plant would be from 1 to 3 days, while the overtime hours reduction is 2-3 hours making the number of seasonal workers that are able to work in the manufacturing sector in the province being insufficient to meet industrial demand in the manufacturing sector. This is consistent with the research on labor market conducted by Labour Market Research Division, Ministry of Labor.[2] stating that the cause of the shortage of labor and unemployment is the applicant qualification failure to match the needs of the employer and the job position. The lack of labor is mainly due to the lack of skilled labor. The people who register with the Department of Employment would

not want to work in this sector because it is a low-compensation job, labor intensive, and not recognized by the society such as housemaid, agricultural labor, and fishing industry production labor, etc. In the past years, operators had to hire Myanmar workers in the neighboring areas who come to work through the districts and villages adjacent to the border.[3] There are 21 Sub-districts, 48 villages with 35 border entrances, 34 natural channels, and the relief channel is Singkhon check point. It was also found that the shortage of the seasonal labors still was unable to be resolved. There is still a high rate of influx and outflow of workers.

From what has been mentioned, it can be seen that there is a shortage of seasonal workers in pineapple processing industry and it is an urgent need to be studied on to plan, develop and find solutions to the problem. Therefore, the researchers are aware of the importance and conducted a research on " Factors Affecting Spatial Mobility of Myanmar Workers in Pineapple Processing Industry : A Case Study on PrachuapKhiri Khan Province . The main objective was to study factors affecting the spatial mobility of Myanmar workers in the pineapple processing industry in PrachuapKhiri Khan province. The results studying factors affecting the spatial mobility of Myanmar workers and the equation derived from the research can be synthesized to be a policy guideline for preparing and planning alternative activities that are consistent and deal with shortage of seasonal workers to minimize the economic impact in the study area and can be used as a model for other areas.

II. OBJECTIVE OF STUDY

1. To study the behavior and personal characteristics of Myanmar workers in the pineapple processing industry.
2. To analyze factors affecting the spatial mobility of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province.

III. SCOPE OF STUDY AND AREA

1. Content scope

The focus was on primary data from the sample group about behavior and factors / causes of spatial mobility of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province based on in-depth structured interviews with Myanmar workers through questionnaire created by the researcher. It composed of a variety of questions and unstructured in-depth interviews with pineapple processing industry operators, and observation in the actual area. Secondary data was collected from documents, books, journals and data from the concerned government and private agencies on the internet. The data has been stored in the database and analyzed using both descriptive and inferential statistics.

2. Area Scope

The focus was on primary data survey on behavior and factors / causes affecting the spatial mobility of Myanmar workers in the pineapple processing industry in only 5 districts that still had pineapple processing industry: HuaHin district, Pranburi district, Sam RoiYot district, KuiBuri district, and MueangPrachuapKhiri Khan district

3. Time scope

The focus was on primary data from interviews on behavior and factors / causes affecting the spatial mobility of Myanmar workers in pineapple processing industry during the 6 months in 2017. The secondary data on the results of the registration of Myanmar worker that requested for a work permit of the PrachuapKhiri Khan Employment Office during the year 2015-2016

IV. METHODOLOGY AND DATA ANALYSIS

The objective of this descriptive research was to explain the occurrence of the phenomena by jointly using quantitative and qualitative research methods in the selection of independent variables that were expected to be correlated with the willingness to relocate back of Myanmar workers in PrachuapKhiri Khan province. The research methodology was divided into 4 sections as follows:

1. Research methodology

1.1 Population

Population for quantitative research to analyze factors affecting the spatial mobility of Myanmar workers in the pineapple processing industry in PrachuapKhiri Khan province was selected by using questionnaire for the survey on the behavior and the factors / causes affecting spatial mobility of Myanmar workers in the pineapple processing industry in 5 districts

1.2 Sample

This study was conducted on a large population so the study could not be completed so it is necessary to select part of the population. The researchers therefore have determined the size of the sample group to be 336 by using the Yamane formula.[4]

2. Research implementation

The researchers divided research implementation into two stages as follows:

2.1 The 1st stage: The study on the behavior and personal characteristics of Myanmar workers in pineapple processing industry, PrachuapKhiri Khan province. The researchers conducted the research and data collection as follows:

(1) Unstructured in-depth interviews with 5 pineapple processing industry operator in 5 districts, PrachuapKhiri Khan province.

(2) Primary data collection for quantitative research was performed by surveying the behavior and factors / causes of spatial mobility of Myanmar workers in pineapple processing industry in 5 districts in PrachuapKhiri Khan province. The total number of the

sample group for quantitative research was 336.

(3) Analyzing data from (1) and (2) for determining percentage, mean, standard deviation, skewness, kurtosis, and reliability of the questionnaire. The statistical analysis was done by t-statistics and SPSS statistical program

2.2 The 2nd stage: Analysis of factors affecting the spatial mobility of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province was based on the concept of push and pull models including physical, economic factors, social factor, and political factors.[5] The researchers conducted the research and collected the data as follows:

(1) Testing behavior and factors affecting the spatial mobility of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province by cluster analysis.

3. Research tools

Researchers were the main research tool. The questionnaire was a tool for data collection, divided into 2 categories:

3.1 Questionnaire for interview

Unstructured in-depth interview with pineapple processing industry plant operators

3.2 Questionnaire to survey the opinion

Questionnaire to survey the opinions of Myanmar workers in pineapple processing industry plant on behavior and the factors / causes affecting the spatial mobility of the area. The questionnaire was used as a tool to collect quantitative data.

4. Data Analysis

The analysis of data used in this research was divided into 2 types: analysis of data obtained from qualitative and quantitative researches as follows:

4.1 The qualitative data analysis, data were analyzed and synthesized with descriptive statistics such as the frequency, percentage, arithmetic mean, and standard deviation to describe, categorize and summarize the data on general information obtained from the interview to meet the defined research objectives.

4.2 The quantitative data analysis, there are 2 steps to used analyze the quantitative data in this study.

(1) Analysis of basic statistical data: Basic statistics were analyzed to illustrate the data of all variables in each group: number, mean or maximum mean or minimum mean from the statistical data. This included the number(N), Range, Mean, standard deviation, the skewness, and Kurtosis.[6]

(2) Analysis of the appropriateness of variable: Nonhierarchical Cluster Analysis or sometime called "K – Means Cluster Analysis" by classifying groups based on K-Means Cluster Analysis also known as Nonhierarchical Cluster Analysis or partitioning which is a different from the Hierarchical Cluster Analysis. By using this type of analysis, the researchers must define how many groups to be classified such as k- group. Hence, this method is

called K-Means Clustering by Hartigan that has used K-Means Clustering as the classification technique. [6]

V. RESULTS AND DISCUSSION

1. The results of studying behavior and personal characteristics of Myanmar workers in the pineapple processing industry in PrachuapKhiri Khan Province showed as follows

It was found that the district with the highest number of Myanmar workers was KuiBuri (n=645, 30.64%), followed by Sam RoiYot (n=588,27.93 %), the third was Mueang (n= 371,17.62 %), the 4th was Pranburi (n= 297,14.11 %), and the last one was HuaHin (n=204,9.69 %).

In terms of original domicile of 336 Myanmar workers in the pineapple processing industry, PrachuapKhiri Khan province residents, it was found that the province with the highest number was Myeik province(n=95,28.27%, Tanintharyi(n=82,24.40%), Victoria Point(n=64,19.05%), Dawei(n=50,14.88%), Rangoon(n=27,8.04%), and Bokpyin (n=18, 5.36 %).

If gender classification was used, it was found that the majority was female (n =203 people, 60.4%) and 133 males (39.6 %), the majority was between 25-50 years old, the majority had no longer than 2-year experience working in Thailand, single, education level was primary level, and they have 1-3 family members. Additionally, for the economic characteristics in the aspect of land and property holdings, it was found that there was no Myanmar worker that had any plot of land in PrachuapKhiri Khan but the majority had land in Myanmar at between 1-5 Rai(n= 148, 44 %), followed by less than 1 Rai(n= 110,32.7%), and more than 5 acres (n=78,23.2%) with monthly family debt of 1-2000 baht.

2. The results of studying the satisfaction of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province

From the results of studying the satisfaction of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province, it was found that the overall satisfaction of the Myanmar workers in the pineapple processing industry in PrachuapKhiri Khan province was at a high level(Mean=3.67). When each aspect was considered it was found that, working environment had the highest mean score(Mean=3.96), followed by the relationship between employers and colleagues(Mean=3.53)and compensation and welfare (Mean=3.51), respectively.

2.1 The overall satisfaction of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province was at a high level. When each aspect was considered, working environment had the highest mean score (Mean= 3.96), followed by the relationship between employers and colleagues(Mean=3.53) and compensation and welfare (Mean=3.51), respectively.

2.2 The overall satisfaction of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province in terms of working environment was at a

high level(Mean=3.96). When each aspect was considered from high to low mean scores, it was found that the neatness of the workplace had the highest mean score (Mean =4.19), followed by the division of workplace (Mean=4.07), and the pleasantry of the workplace (Mean=4.06), respectively.

2.3 The overall satisfaction of Myanmar workers in the pineapple processing industry in PrachuapKhiri Khan province in the aspect of compensation and welfare was at a high level(Mean=3.51) When each aspect was considered from high to low from the 3 highest , it was found that the appropriateness of the entitlement to take leaves from work had the highest mean score (Mean=4.27), followed by the appropriateness of the salaries based on the work duties(Mean=3.59), and the appropriateness of the agency welfare(Mean= 3.58), respectively.

2.4 The overall satisfaction of Myanmar workers in the pineapple processing industry in PrachuapKhiri Khan province in the aspect of relationships with employers and colleagues was at a high level (Mean=3.53). When each aspect was considered from high to low from the 3 highest , it was found that employer friendliness had the highest meanscore(Mean=4.13),followed by colleagues cooperation in working (Mean=3.60), and the generous support, caring, and concern from colleagues (Mean=3.42), respectively.

3. For the results of an analysis on factors affecting the spatial mobility of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province, the researchers used key statistical techniques to conduct the analysis such as Cluster Analysis , Nonhierarchical Cluster Analysis or also known as K - Means Cluster Analysis.It was found that the spatial mobility of Myanmar workers in pineapple processing industry in PrachuapKhiri Khan province to Cluster 1 was type A migration at 42.86 % and the Cluster 2 was type B migration at 57.14 %

Number of Cases in each Cluster

Cluster	1	144.000
	2	192.000
Valid		336.000
Missing		.000

CONCLUSIONS

Since most of type A migration involved to travelers without changing their domicile. While type B migration included seasonal and temporary workers. These movements are considered spatial circulation, most of which referred to as spatial mobility especially short time and repeat without clear intent whether it is permanent or temporary spatial mobility.[7]

This is also consistent with the concept of "network migration" as Massey DS, et al. described [8] that network migration refers to a sets of interpersonal relationships among migrants, former migrants and non-migrants in original and destination areas through

the kinship of relatives, friends, and spirit of local people in common area. This is an internal social relationship: household, relatives, friends, villages, and those with common nation of migrants in destination area. It is the connection of the Myanmar workers from their place of origin to the destination. They have experienced in migrating, and experienced in decision making on economic factors, social factor, and personal factors. This resulted in a part of the decision to move having to depend on the relationship. It was found that the educational level of the individual is concretely reflected in the professional skills coupled with the level of education. It was found that level of education determines the level of occupation, professional development resulting in having more skill, ability to learn to adapt, absorb, think, work, memorize, mimic, technology to make a living and more than people with lower education. It will also lead to new ideas and the skills to be used back to the original community and being able to excellently adjust the economy.[9] In addition to study should be conducted on all four types of spatial mobility based on the principle of classification of 4-step mobility of Ducan [10] to be aware that the mobility constitutes complete circulation in every dimension as shown.

Spatial mobility	Recurrent mobility	Non-recurrent mobility
Local / Urban	A	C
Outside / Local	B	D

ACKNOWLEDGMENTS

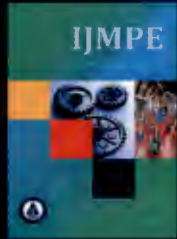
The author would like to express sincere thanks to Suan Sunandha Rajabhat University for kindness and support to this paper.

REFERENCES

- [1] Planning and Information Technology Division, "Statistical of migration yearbook 2014-2015 (Unpublished work style)," unpublished. 2015
- [2] Labor demand research Division, Ministry of Labor, Recommendations on statistics of International Thailand's borderlands Migration [Online]. Accessed 5November 2016. Available from <http://www.doe.go.th/Imi_new.index.asp>
- [3] MonthakantRodklai,(2017) " Burmese Teenagers' Need and Decision on Migration in Thailand ", International Journal of Management and Applied Science (IJMAS), pp.35-38, Volume-3,Issue-5.
- [4] Taro Yamane.Statistics Introductory Analysis. (3rd edition). Singapore: Time PrintersSdn. Bhd, 1973.
- [5] Lee, Everett S. A Theory of migration. Reprinted in J.A. Jackson (ed.) Migration Cambridge: Cambridge University Press, 1996.
- [6] KanlayaVanichbuncha. Static for Research. Bangkok: Thammasarn, 2006.
- [7] Zelinsky W. The hypothesis of the mobility transition. Geographical review, pp.226, 1971.
- [8] Massey D.S., Arango J., Hugo G., Kouaouci A., Pellegrino A., and Taylor J.E., Worlds in motion: Understanding international migration at the end of the millennium. New York: Oxford University Press, 1998
- [9] Parwell Mike. Population Movement and the Third Word. London: routledge, 1993.
- [10] Hauser, Philip M. and Otis Dudley Duncan. "The Nature of Demography." in P. M. Hauser and O. D. Duncan, eds., The Study of Population. Chicago: The University of Chicago Press, 1959.

JOURNAL PUBLICATION PARTNER

IRAJ INTERNATIONAL JOURNALS



IJMPE

www.ijmpe.iraj.in

International Journal of Mechanical and Product Engineering

ISSN(P):2320-2092
ISSN(e):2321-2071



IJEEDC

www.ijeedc.iraj.in

International Journal of Electrical, Electronics and Data Communication

ISSN(P):2320-2084
ISSN(e):2321-2950



IJACEN

www.ijacen.iraj.in

International Journal of Advance Computational Engineering and Networking

ISSN(e):2320-2106
ISSN(P):2320-2106

Journal indexed in



International Journal of Soft Computing And Artificial Intelligence (IJSCAI)

ISSN(P):2321-404X
ISSN(e):2321-4384
www.ijscai.iraj.in



International Journal of Advances Computer Science and Cloud Computing (IJACSCC)

ISSN(P):2321-4058
ISSN(e):2321-4392
www.ijacsc.com



International Journal of Advances in Science, Engineering and Technology(IJASEAT)

ISSN(P):2321-8991
ISSN(e):2321-9009
www.ijaseat.iraj.in



International Journal of Industrial Electronics and Electrical Engineering(IJIEEE).

ISSN(P):2347-6982
ISSN(e):2349-204X
www.ijiee.iraj.in



International Journal of Advances in Mechanical and Civil Engineering(IJAMCE)

ISSN(P):2394-2827
www.ijamce.iraj.in



International Journal of Manager and Applied Science (IJMAS)

ISSN(P):2394-7926
www.ijmas.iraj.in



International Journal of Advance in Electronics and Computer Science (IJAECs)

ISSN(P):2393-2835
www.ijaecs.iraj.in

IRAJ Journals Listed in University Library

MIT, University of California Berkeley, Stanford, Cambridge, Oxford, Harvard

Visit for Upcoming Conferences- www.theires.org



This book will be available online at
WORLD RESEARCH LIBRARY
www.worldresearchlibrary.org

ISBN



978-93-87703-29-2