



# **WORK IMPROVEMENT IN NEIGHBOURHOOD DEVELOPMENT**

TSUYOSHI KAWAKAMI TON THAT KHAI KAZUTAKA KOGI



**TRAINING PROGRAMME  
ON SAFETY, HEALTH  
AND WORKING CONDITIONS  
IN AGRICULTURE**



Center for Occupational  
Health and Environment



International  
Labour Office



The Institute for  
Science of Labour



Bread for the  
World

*Asian version*

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# WORK IMPROVEMENT IN NEIGHBOURHOOD DEVELOPMENT

Training programme on  
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Third published 2005.

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**The Centre for Occupational Health and Environment, Can Tho city,  
Vietnam (ECHO)**

**Work Improvement in Neighbourhood Development**

**14.8.2003**

**ISBN: 709/2003/QTG**

▪ **WORK IMPROVEMENT IN NEIGHBOURHOOD DEVELOPMENT**

*Publisher: Mr. Quang Thang*

*Editor: Ms. Ai Hoa*

*Proof-reader: Ms. Kay Newman*

*Designer: Mr. Ton That Khai*

*Printed in Can Tho Printing House, 218, 30 April st., Can Tho city, Vietnam*

*Register number of publishing plan: 277/XB-QLXB-3*

*Issued by Publishing Bureau on March 17, 2005*

*Achieved printing and sent in legal depot in August, 2005.*

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## Preface to new WIND Asian Version

The WIND (Work Improvement in Neighbourhood Development) programme was born in Cantho Province, Vietnam in 1998 as the product of technical cooperation between the Centre for Occupational Health and Environment, Cantho Department of Health, Vietnam and the Institute for Science of Labour, Kawasaki, Japan. The Toyota Foundation provided the financial assistance for its genesis. Since then, WIND has spread to many provinces of Vietnam with the assistance of the ILO, the Institute for Science of Labour, and Bread for the World, an NGO based in Germany. Many farmers in Vietnam have actively and voluntarily participated in the WIND training and implemented significant improvements in safety, health and working conditions using their own resources and wisdom. Learning from these initiatives and achievements in Vietnam, the ILO has facilitated the spread of the WIND programme to Cambodia, Mongolia, the Philippines, Thailand, and even to some East European and African countries. Cantho continues to maintain its position as WIND innovator, having established a sustainable mechanism for delivering the programme to many villages through their network of rural health centers. Farmers in Cantho have carried out more than 100,000 improvements. The success and growth of the WIND programme are owed to these farmers at grass-root level. This new WIND manual is a product of the most recent development of the WIND programme in Cambodia, Mongolia, the

Philippines, Thailand and Vietnam. On the basis of the previous WIND version in 2002, texts have been revised to reflect the new achievements and findings. Many new illustrations and photos showing good examples in Asia are added. These revisions target the requirements of many potential users of the WIND programme in Asia. The same team who had developed the previous WIND version: Dr Tsuyoshi Kawakami, Safety and Health Specialist of ILO Subregional Office for East Asia, Bangkok, Thailand; Dr Ton That Khai, Director of Centre for Occupational Health and Environment, Cantho, Vietnam; and Dr Kazutaka Kogi, the Institute for Science of Labour, Kawasaki, Japan, prepared the text, arranged photos, and supervised the development of the illustrations. We are grateful to Mr Tun Sophorn, Ms Shureenchimeg Zokhiolt, and Ms Sara Arphorn for their support as colleagues working together on WIND development in Cambodia, Mongolia, and Thailand. A special acknowledgement must go to Ms Tran Thi Sam of Cantho Daily Newspaper, for developing the illustrations. It is our sincere wish that this manual provide many farmers with a powerful and effective tool to improve their safety, health and working conditions.

*Bangkok, Thailand, May 2005*

Christine Evans-Klock  
Director  
ILO Subregional Office for East Asia

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## PREFACE

Because research carried out by both the ILO and others leads us to conclude that agriculture is one of the most hazardous sectors of work, it clearly requires special and priority attention. Safety and health risks in the sector are numerous and diverse: manual handling of heavy materials and loads, strenuous work postures, long and irregular working hours, exposure to extreme weather conditions, pesticides and other agro-chemicals. Farms abound in opportunities for parasitic infections and animal and insect bites. Basic amenities for sanitation and welfare are frequently absent.

All of these hazards are increased because of the fact that in agriculture the "workplace" includes the family dwelling. Tools, fertilizers and pesticides are often stocked in farmers' houses, increasing the risk exposure of all family members, especially children.

The Work Improvement in Neighbourhood Development (WIND) training programme provides practical responses to the special problems of agricultural safety and health. Building on the ILO's experience gained through the WISE (Work Improvement in Small Enterprises) programme, WIND applies a participatory and action-oriented training approach, designed for rapid and sustainable improvements in farmers' safety, health and working conditions. To ensure relevance, as well as sustainability, WIND is very much reliant on, and

responsive to, farmers' own initiatives, knowledge and resources.

The WIND methodology has a good record of promoting equality of participation of men and women in rural communities. Many married couples in agricultural districts in Vietnam, for example, have participated in WIND training courses together. The joint efforts of the men and women who took these courses have resulted in significant practical improvements and risk reduction in both work and other aspects of life in rural communities.

It gives me particular pleasure to present the present manual in Vietnamese because the very first WIND workshop was held in Vietnam: in My Tan village in the commune of Hoa Luu (Cantho Province) in 1995. It was a collaborative effort between the Centre for Occupational Health and Environment (Cantho, Vietnam) and the Institute for Science for Labour (Kawasaki, Japan), generously financed by the Toyota Foundation. This workshop was followed in 1996 by the first WIND manual, *Ergonomic Checkpoints for Agricultural Working and Living Conditions*.

Since then, WIND has spread to many other provinces in Vietnam and beyond. With the assistance of the ILO, the Institute for Science for Labour and Bread for the World, an NGO based in Germany, the methodology has been adopted in

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Thailand and the Philippines, Cantho Province has, however, maintained its position as WIND innovator, having established a sustainable mechanism for delivering the programme to many villages through their network of rural health centres.

The present manual is a distillation of seven years of WIND experience, drawn principally from farmers' own initiatives to improve the quality of their lives and work. It has been drafted by Dr Ton That Khai, Director of the Cantho Centre for Occupational Health and Environment, in collaboration with Dr Tsuyoshi Kawakami, Specialist on Occupational Safety and Health in the ILO East Asia Multidisciplinary Advisory Team. Thanks are due to the many Vietnamese and international specialists who provided valuable comments for improving the contents, especially Ms Doan Minh Hoa, Mr Hoang Van Hung and their staff from the Department of Labour Protection of the Ministry of Labour Invalids and Social Affairs, Dr Nguyen Thi Hong Tu and her staff from the Department of Preventive Medicine of the Ministry of Health, Dr Nguyen Ngoc Nga of the National Institute of Occupational and Environmental Health, and Dr Kazutaka Kogi of the Institute for the Science of Labour of Kawasaki, Japan.

Most particular gratitude needs to be conveyed also to the many farmers in Cantho and Hai Duong provinces, in which pilot WIND training courses were tested in the development of this manual. Without their great efforts and cooperation, this book would never have seen the

light of day.

A special acknowledgement must go to Ms Tran Thi Sam of Cantho Daily Newspaper, for illustrating this manual, showing good local practices.

I have no doubt this manual can constitute a powerful and effective tool to empower Vietnamese men and women in agriculture to improve their safety, health and working conditions.

*Bangkok, Thailand, December 2002*

Ian Chambers  
Director, ILO Area Office and East Asia  
Multidisciplinary Advisory Team  
(BAO/EASMAT)

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# INTRODUCTION

It is our great pleasure to present the new upgraded version of the WIND (Work Improvement in Neighbourhood Development) manual. This WIND manual consists of 42 checkpoints useful for improving safety, health and working conditions in agriculture. Special focus is placed on easy-to-implement solutions and learning from existing local good examples. The ideas you will find in this manual are concrete, practical and can be implemented at low-cost. Many ideas in this manual come from the innumerable good examples developed by farmers in Cambodia, Mongolia, the Philippines, Thailand, and Vietnam.

The WIND manual applies the concept of participatory, action-oriented training approaches. From our past experiences, good training tools are crucial for strengthening and sustaining the self-help initiative of local farmers. This manual is carefully designed to assist farmers in implementing improvements. For example, the action-checklist of this manual is a powerful tool to help farmers find possible improvement points in their farms.

You can use this manual for checking your workplace conditions and for learning various solutions that are simple, inexpensive and therefore applicable, even on small farms. From the experiences of many WIND

training workshops conducted in the Mekong Delta area of Vietnam, basic principles for improvement actions in agriculture have been developed.

They are:

- to look at multi-faceted aspects of farmers' work and start with low-cost improvements using locally available materials and expertise;
- to continue improvement actions in a step-wise manner for sustainability;
- to help people look at both living and working conditions for a better quality of life;
- to promote exchange of experiences within neighbourhoods to widen your views;
- to promote the equal participation of women and men from the same family in the training workshop as well as in implementing improvements after the training.

You should read and use this manual together with your family and neighbours. Share practical experiences and ideas and learn how your neighbours have solved the same problems which you have. The following is some tips on how to use this manual effectively with your family and neighbours:

- to read the manual together to understand the contents of all the checkpoints clearly;
- to carry out the walk-through with the checklist exercise on farms and in houses with the participants;



- 
- to discuss the checklist results in groups and come up with a list of three to five priority actions for improvements;
  - to refer to the related checkpoints of this manual to confirm your ideas.

Improvement actions will be sustained when you join the network of farmers who have participated in a WIND training workshop. For example, Can Tho Province of Vietnam has trained 3,825 people as WIND facilitators. All the trained WIND facilitators have disseminated practical ideas for improving safety, health and working conditions in agriculture in their respective communities. Their networks have been established and maintained to provide follow-up support to the participating farmers. It was essential to network with trained farmers and repeat the follow-up

activities with them to sustain and expand improvement actions.

We do hope that this manual will be useful to many farmers who aims to improve their safety, health and working conditions. Your feedback on the experience of using this manual is important for us to continuously update the contents of this manual. We would appreciate it if you could inform us of the way you have used this manual and your ideas for improvements. You can contact us through Dr. Tsuyoshi Kawakami, Safety and Health Specialist, ILO Sub-regional Office for East Asia Bangkok, Thailand or Dr. Ton That Khai, Director, Center for Occupational Health and Environment, Can Tho Department of Health, Can Tho City, Viet Nam. Or you can email at [kawakami@ilo.org](mailto:kawakami@ilo.org) or [cpo@hcm.vnn.vn](mailto:cpo@hcm.vnn.vn).

May 2005

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# ACTION CHECKLIST

## HOW TO USE THE CHECKLIST

1- Define the work area to be checked. Ask the head of the family about the main occupation and any important labour problems.

2- Read through the checklist and spend a few minutes walking around the work area before starting to check.

3- Read each item carefully. Look for a way to apply the measure. If necessary ask some questions to the farmers. If the measure has been applied or it is not needed, mark **NO** under “ Do you propose action? ”. If you think the measure is worthwhile, mark **YES**. Use the space under **REMARKS** to put a description of your suggestion or its location.

4- After you have gone through the whole items, look again at the items you have marked **YES**. Choose a few items where the benefits seem likely to be the most important. Mark **PRIORITY** for these items.

5- Before finishing, make sure that for each item you have marked **NO** or **YES**, and that for some items marked **YES** your have marked **PRIORITY**.

I. MATERIALS STORAGE AND HANDLING

*1- Keep passageways clear and in good condition for the movement of people and materials.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



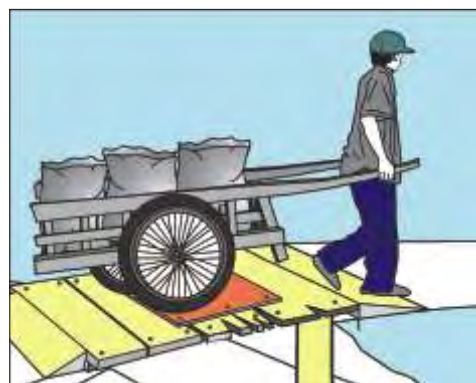
*2. Eliminate sudden height differences and holes on transport routes.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*3. Construct wide enough and stable bridges over canals or over ditches at the edge of field or road.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*4. Use multi-level shelves or racks near the work area for storing materials, tools or products.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



5. *Provide containers or baskets of appropriate sizes and with good grips to carry materials and farm products.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



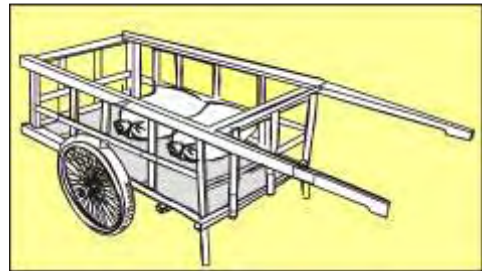
6. *Use carts, hand trucks, vehicles, boats or animals to carry heavy materials.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



7. *Attach large enough wheels to carts and hand trucks to work effectively on field routes.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



8. *Use roller conveyors or other mechanical means for moving or lifting heavy materials.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



## II- WORK STATIONS DESIGN AND WORK TOOLS

9. *Adjust the work height so that work is done at elbow level or slightly lower than elbow level.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



10. *Provide stable chairs or benches with sturdy backrests.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



11. *Choose work methods to alternate standing and sitting and to avoid bending and squatting postures as much as possible.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



12. *Put frequently used tools, switches and materials within easy reach of farmers.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....





13. Choose tools that can be operated with minimum force.

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....  
.....



14. Provide a home for each tool.

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....  
.....

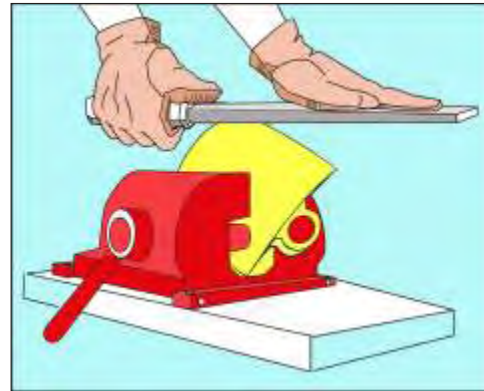


15. Use jigs, clamps or others fixtures to hold items while work is done.

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....  
.....



### III- MACHINE SAFETY

16. Purchase safe machines and maintain them properly.

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....  
.....





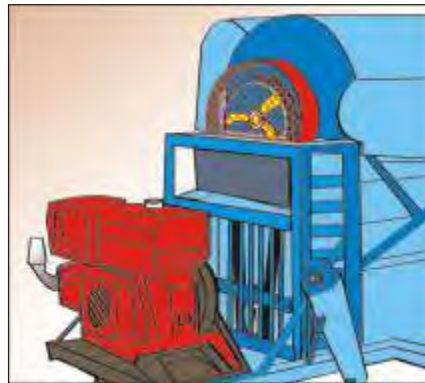
*17. Attach proper guards to dangerous moving parts of machines.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*18. Use appropriate feeding devices to avoid danger and increase production.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*19. Make the emergency controls clearly visible and attach local language labels to the controls or switches.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*20. Ensure safe use of electricity for machines and equipment.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



#### IV- WORK ENVIRONMENT AND CONTROL OF HAZARDOUS AGENTS.

*21. Increase the use of natural ventilation to improve the indoor climate.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*22. Use daylight and bright walls for lighting up the workplace.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*23. Avoid continuous exposure to excessive heat or cold.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*24. Select safer pesticides and use the minimum amount.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



25. *Keep pesticides, agro-chemicals and spraying devices in a safe and designated place.*

Do you propose action ?

☐ No ☐ Yes ☐ Priority

Remarks:.....

.....



26. *Put labels on pesticides and agro-chemicals.*

Do you propose action ?

☐ No ☐ Yes ☐ Priority

Remarks:.....

.....



27. *Establish safe methods to treat bottles and cans of used pesticides and chemicals.*

Do you propose action ?

☐ No ☐ Yes ☐ Priority

Remarks:.....

.....



28. *Collect safety and health information such as the safe use of agro-chemicals and disseminate the information to the community.*

Do you propose action ?

☐ No ☐ Yes ☐ Priority

Remarks:.....

.....



29. *Be aware of animals, insects or worms that may harm farmers.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



### V- WELFARE FACILITIES

30. *Provide adequate supply of drinking water and refreshment at the farm.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



31. *Ensure regular timing of meals and have a variety of nutritious foodstuffs.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



32. *Build clean, hygiene toilets and washing facilities.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....





33. *Provide resting corners and facilities for recovery from fatigue.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



34. *Use proper protective devices such as clothes, gloves, boots, shoes, hats, helmets to protect from injuries or contact with hazardous substances.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



35. *Provide first aid equipment.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



36. *Take special care of pregnant women and farmers with disabilities.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



37. *Keep children safe to prevent them from having accidents or diseases.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



### V- WORK ORGANIZATION

38. *Organize a better work layout to reduce the distance for carrying materials.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



39. *Insert frequent short breaks.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



40. *Take regular weekly holidays.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*41. Perform community jobs together.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....



*42. Share family responsibilities to avoid overburdening a particular family member.*

Do you propose action ?

☐ No      ☐ Yes      ☐ Priority

Remarks:.....

.....

