INTRODUCTION

Human ergology has been promoting real work and life studies aiming to support people’s daily life-technology to achieve human-centred work. The core concept and methods in human ergology stress active participation of local people to identify practical solutions to improve their working lives (Kogi, 1995). The researchers in human ergology have looked for existing good practices and initiatives of local people and studied the practical way to support such local efforts (Kawakami and Khai, 1997). Important was to learn from the strength of local people instead of merely mentioning their weaknesses and constraints.

The positive stance in human ergology research contributed substantially to the birth of many participatory training programmes to improve working conditions in various grassroots workplaces.
They are, for example, the WIND (Work Improvement in Neighbourhood Development) training programme with farmers (Kawakami and Khai, 2009), WISH (Work Improvement for Safe Home) with home workers, WISCON (Work Improvement in Small Construction Sites) with construction workers, or WARM (Work Adjustment for Recycling and Managing Waste) with waste collectors. These participatory, training programmes are action-oriented and have commonly applied practical training tools such as good example photo sheets, action-checklists as well as group work methods. The training tools have assisted active involvement of many people in grassroots workplaces and supported their self-help initiatives to make positive changes in their workplaces (Khai et al., 2005). Participating workers and employers have implemented many practical, low-cost improvements by using their own ideas and available local resources (Kawakami and Khai, 2010; Kawakami et al., 2011).

The present research was aimed to study and discuss how human ergology viewpoints contributed to the developments of the participatory training programmes to improve safety, health and working conditions. Special emphasis was placed on the roles of real life and work studies and the practical approaches and methodologies which could be widely applicable in industrially developing countries.

METHODS

The course of the development of typical participatory training programmes to improve safety, health and working conditions were studied to identify how the core human ergology approaches contributed to developing such participatory training programmes. The programmes studied were: WISH with home workers in Cambodia (Kawakami et al., 2006), WISCON with workers and managers in small construction sites in Thailand (Kawakami and Khai, 2003), and WARM with waste collectors in Fiji (Kawakami and Khai, 2010).

The WISH, WISCON, and WARM programmes were applying the typical participatory training methodology to improve safety, health and working conditions of their target workplaces. Their training programmes commonly applied practical approaches to support the self-help initiative of participants. The training started with the workplace visit with an action-checklist exercise, and proceeded to trainer presentations focusing on local good examples. After these, participants entered group discussions to identify good points of the workplace which they visited for the checklist exercise and proposed the improvement ideas (Kawakami et al., 2011).

In the study, the core human ergology approaches emphasized were: (1) how real work and life studies contributed to the programme development, (2) how positive efforts of local people (daily life-technology) were incorporated into the programme as the basis for the further developments, (3) how the programmes promoted active participation of local people to identify practical solutions, and (4) learning from local human networks to reach grassroots workplaces. Further, the achievements and the impact of the programmes were analyzed to find future challenges and actions.

RESULTS

The core concept and methods in human ergology research contributed substantially to the development of all the three participatory training programmes studied. As shown in Fig. 1, all the three programmes took the similar steps in the actual training activities to promote active participation and devise practical improvements learning from local good examples. The human ergology approach applied to the development of these training programmes may be summarized as indicated in Fig.2. The following points were particularly important in each of the three programmes.
At the beginning of the development of the WISH programme in Cambodia, good practice approaches were largely adopted. The team who had launched the WISH programme consisted of a human ergology researcher and the representatives of local government units in charge for occupational safety and health, and employers’ and workers’ organizations and NGOs. The team visited many local home workplaces which manufactured various local products like food, clothes, and handicrafts, and observed their working conditions carefully. The team listened to the voices of workers in the workplace and collected existing local good examples in terms of the improvement of safety, health and working conditions (Fig. 3). These examples collected were used in the WISH training later and presented to training participants.

The team cooperated with various networks of local people to reach home workers belonging to the informal economy. The team found that local NGOs, for example, had good contacts with many home workplaces since they had assisted the home workers in finding better customers for higher income. Trade union leaders and members also had informal access to many home workplaces through their own trade union experiences. These local, informal human channels enabled the team to reach home workers in a systematic way.
Representatives of the government, employers, workers and NGOs were trained as local WISH trainers to expand the coverage of the training through their networks. They actively applied photo sheet methods for their on-site training activities. The photo sheets were printed pictures of local good examples. The local WISH trainers carried out the on-site WISH training by using the photo sheets even in the workplaces in which computers and projectors were not available.

WISCON

The team who had developed the WISCON training programme in Thailand consisted of human ergology researchers and safety and health practitioners. Unlike large-scale construction sites, the workers working in small construction sites were mostly informal economy workers and often not registered to the government office. Accordingly, the workers had few opportunities to be trained in occupational safety and health.

Knowing the fact, the team visited several construction sites directly to observe their work and collected existing good examples, and carefully listened to the experiences of workers. Through this approach, the team learned from the past accident experiences of the workers and identified priority areas for improvements of small construction sites such as safety in the work at height, prevention of nail accidents, or safe use of electricity. Based on these findings, the team developed an action-checklist and clear-cut illustrations showing good examples which workers and supervisors of small construction sites could easily apply.

The team organized the WISCON training workshop by using the training materials developed, and invited the workers and site managers to the training. The team stressed that the practical, easy-to-apply nature of participatory training styles (Fig. 4). This was the first training in safety and health to many workers. They actively contributed the development of improvement proposals from their own work experiences. The human ergology approaches and the participatory training programme active involved the local workers in unregistered small construction sites, who had received few training opportunities in the past.

WARM

The WARM programme aimed at the joint improvements in working conditions of waste collectors and environmental protection through the efficient waste collection and recycling systems. For this purpose, the team work efforts among human ergology researchers, waste collectors and managers, and representatives of the community and local government units in charge for waste collection were largely promoted. The team observed the real work of waste collectors from the beginning until the end of two working days (Fig. 5). The observations were useful for finding local good efforts and designing the WARM training programme to further support existing local
The importance of community cooperation was confirmed to improve safety and health of waste collectors.

The WARM programme devised consisted of four main areas. They were: safe waste handling and community cooperation; safety of waste collection trucks; work environment and personal protective equipment; and welfare facilities and work organization. Participants representing workers, managers, communities and the local government discussed the ways of improvement actively. In particular, the representatives of the community, who had been active in environment protection through recycling activities, came to realize the importance of the improvements of working conditions of waste collectors. Their participation was essential for improving working conditions of waste collectors since the way how the community placed their waste in the collection sites directly influenced safety and health of waste collectors. They proposed practical ideas for the improvement of the work of waste collectors in the WARM training and also in their own community meetings.

DISCUSSIONS

The three participatory training programmes aiming to assist grassroots workplaces commonly applied the core concept and methods of human ergology. As summarized in Fig. 2, they were: visiting workplaces and directly observing their working conditions, listening to the voices of workers
and employers, leaning from existing local solutions, applying group work methods, and working with various people’s organizations such as workers’, employers’ organizations, local communities and NGOs.

In all the participatory training programmes, follow-up actions were planned and carried out for sustainability and local trainers and collaborators were trained for wider coverage through people’s networks. Easy-to-apply participatory training tools such as action-checklists, photo sheets and illustrations showing local good examples assisted these local trainers in organizing participatory training workshops in their communities. The texts of the training manuals were carefully drafted by using easy-to-understand words and expressions. The manuals emphasized ways to promote cooperation in the workplace or in the community and also people’s benefits through practical improvements.

The next important actions proposed were to further extend participatory approach to more grassroots workplaces and facilitate strengthening cooperation among people’s organizations. Findings from real work and life studies in human ergology will be able to continue supporting the further improvements of participatory training programmes. It is desirable to continue upgrading the participatory tools and approaches learning from innovative experiences.

In conclusion, the key concepts and methods in human ergology research provided practical ideas to develop and strengthen participatory approaches to improving safety, health and working conditions at grassroots workplaces, and will further guide us to devise new participatory training programmes to support positive actions of local people. Real work and life studies in human ergology will continue to be important to find the practical solutions that can support the local self-help initiative.

REFERENCES


