

Family farms

The family farm is an enterprise and a homestead on which both children and the elderly are likely to be present. In some parts of the world, farm families live in villages surrounded by their farm land. The family farm combines family relationships and child raising with the production of food and other raw materials. Family farms range from small, subsistence or part-time operations worked with drought animals and hand tools to very large, family-held corporations with numerous full-time employees. Types of family farms are distinguished by national, regional, cultural, historical, economic, religious and several other factors. The size and type of operations determine the demand for labour from family members and the need for hired full- or part-time workers. A typical farm operation may combine the tasks of livestock handling, manure disposal, grain storage, heavy equipment operation, pesticide application, machinery maintenance, construction and many other jobs.

The Organization for Economic Cooperation and Development (OECD 1994) reports several trends in agriculture, including:

1. the increasing economic dominance of large, highly mechanized producers
2. the increase in off-farm employment as the principal source of income for small farms
3. the controlling role of national and international agricultural policies and trade agreements.

The concentration of farm operations and the reduction in the number of family farms has been recognized for decades. These economic forces affect the work processes, workload and safety and health of the family farm. Several key changes are occurring in family farming as a direct result of these economic forces, including expanding workloads, increasing reliance on hired labor, use of new techniques, unsupervised adolescents and struggling to maintain economic viability.

Children nearing adolescence contribute to family farm productivity. Small and medium-size family farms are likely to rely on this labor, especially when adult family members work off the farm. The result may be unsupervised work by farm children.

Hazards

The family farm is a hazardous work environment. It is one of few hazardous workplaces where multiple generations of family members may live, work and play. A farm can be the source of many and differing life-threatening hazards. The most important indicator for safety and health is workload per worker—both physical labor and decision-making or mental workload. Many serious injuries happen to experienced farmers, working with familiar equipment in familiar fields, while doing tasks that they have been performing for years and even decades.

Hazardous agricultural materials including pesticides, fertilizers, flammable liquids, solvents and other cleaners are responsible for acute and chronic illnesses in farm workers and family members. Tractors, augers and other mechanized equipment have permitted a dramatic increase in the land and livestock that can be worked by a single farmer, but mechanization has contributed to severe injuries in agriculture. Machinery entanglement or tractor rollover, livestock,

operating equipment on public roads, falling or being struck by falling objects, material handling, confined spaces and exposures to toxins, dust, moulds, gases, chemicals, vibration and noise are among the principal risks for illness and injury on farms. Climate and topography (e.g., weather, water, slopes, sinkholes and other obstacles) also contribute to the hazards.

Overall, agricultural occupations produce some of the highest rates of death and injury of all types of jobs. Unfortunately, farm children are at great risk along with their parents. As farm families attempt to remain profitable as they expand, family members may take on too high a workload and place themselves at greatly increased risk of fatigue, stress and injury. It is under these conditions that farm children are most likely to try to help out, often working unsupervised. In addition, unrelenting stressors associated with farming may lead to depression, family breakup and suicide. For example, principal owner-operators on single-family farms appear to be at particularly high risk for suicide when compared to other rural residents (Gunderson 1995). Further, the costs of illnesses and injuries are most often borne by the family member(s), and by the family enterprise—both as direct medical costs and in the reduction of labour necessary to maintain the operation.

Prevention

Classic agricultural safety and health programmes emphasize improved engineering design, education and good practices. Special attention on these farms needs to be placed on age-appropriate tasks for children and older adults. Young children should neither be allowed near operating farm equipment nor ever ride on tractors and other farm equipment. They should also be excluded from farmstead buildings that present hazards including electricity, confined spaces, chemical storage areas and operating equipment (National Committee for Childhood Agricultural Injury Prevention 1996). Warning labels should be maintained on equipment and chemicals so adults are informed of hazards and can thus better protect their families. The availability of experienced part-time or full-time workers reduces the burden on the family during periods of high workloads. The abilities of older adults should be a factor in the tasks that they perform.

Self-reliant farmers, determined to complete tasks regardless of the risks, may ignore safe work practices if they perceive them to interfere with farm productivity. Improving safety and health on family farms requires engaging the active participation of farmers and farm workers; improving attitudes, behavioral intentions and work practices; recognizing farm economics and productivity as powerful determinants in shaping the structure and organization of the enterprise; and including agricultural specialists, equipment dealers, insurance agents, bankers, local media, youth and other community members in generating and sustaining a broad climate of farm and community safety.

Ted Scharf, David E. Baker and Joyce Salg

market 90% of locally grown food. Women are also given the task of growing the subsistence diet for their families (Loftas 1995).

Children become farm labourers around the world at an early age (figure 64.2), working typically 45 hours per week during harvesting operations. Child labour has been a part of plantation agriculture throughout its history, and a prevalent use of contract

labour based upon compensation for tasks completed aggravates the problem of child labour. Whole families work to increase the task completion in order to sustain or increase their income.

Data on plantation employment generally show that the highest incidence of poverty is among agricultural wage labourers working in commercial agriculture. Plantations are located in tropical

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