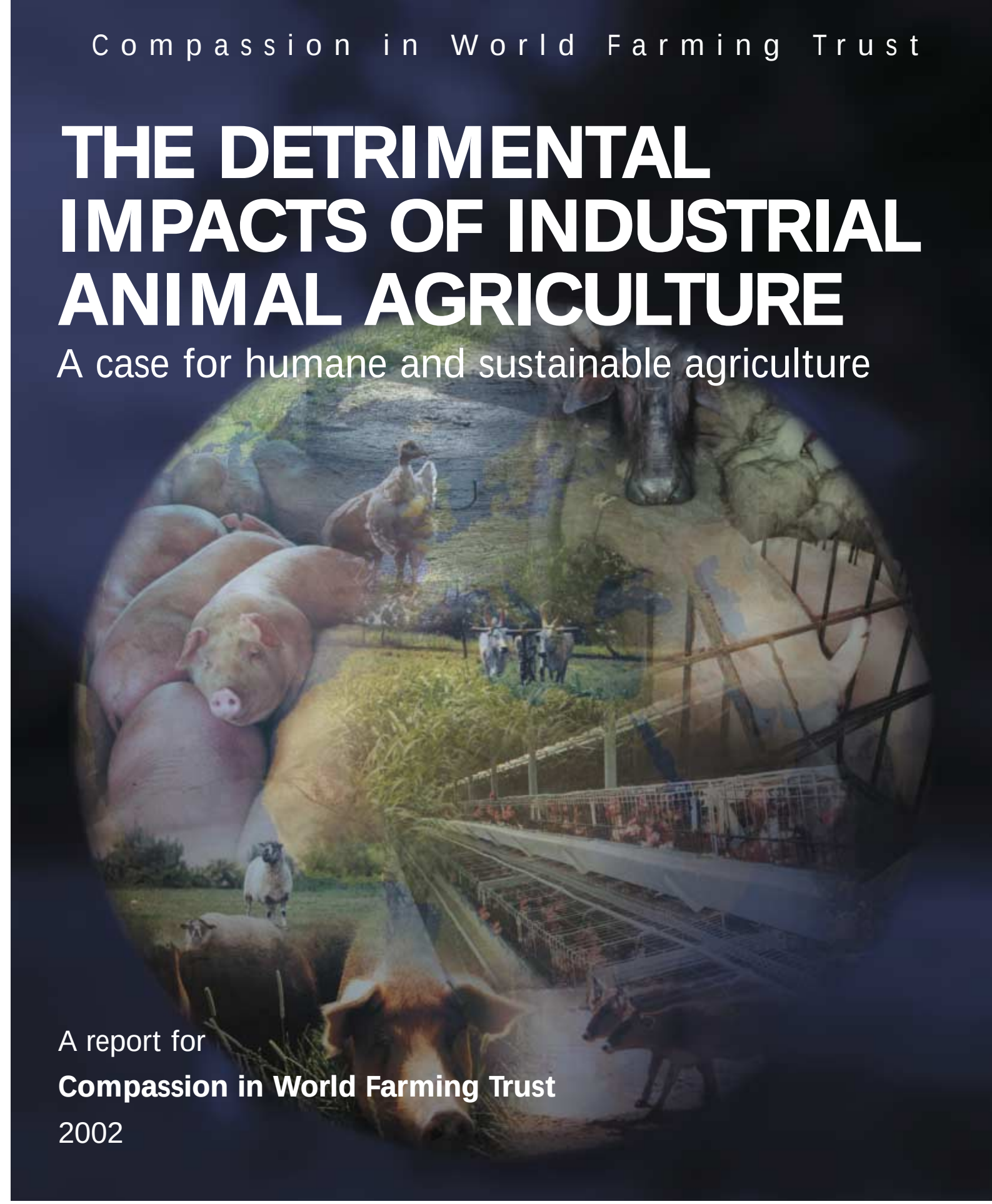
Compassion in World Farming Trust

THE DETRIMENTAL IMPACTS OF INDUSTRIAL ANIMAL AGRICULTURE

A case for humane and sustainable agriculture



A report for

Compassion in World Farming Trust

2002

CIWF TRUST

Advancing farm animal welfare

Introduction

Two-thirds of the world's livestock are found in 'developing' countries. Most farmers in these countries practise multi-purpose, non-intensive methods of animal production. Animals are critical for their livelihoods, cultures and social status. Many of these animals graze areas not suitable for crops or scavenge freely, often consuming garbage and harmful insects. Small farms that combine livestock and crops use the land relatively sustainably: crop residues are fed to animals; manure provides good fertiliser and fuel; and animal draught power reduces the need for fuels (and associated emissions). Smallholder livestock production makes a substantial contribution to the economy and meet local food security needs.

In India, oxen are valued for multiple purposes.

In India, for example, livestock contributes about 30% of the total farm output, and 80% of livestock products come from small farmers with three to five animals and less than two hectares of land. (Rangnekar 2001). It is estimated that one-quarter of the world's total land area is being used for grazing livestock, including extensive grazing systems. (FAO 1998). A further one-fifth of the world's arable land is used for growing cereals to feed livestock. This makes livestock production the largest user of land in the world.

The 'Livestock Revolution'

However, livestock production systems in these countries are changing fast, due to the so-called 'Livestock Revolution'. The global demand for meat is expected to more than double over the next twenty years, creating an increased demand for cereal feed. Southern countries are expected to become the main producers of meat and animal products for the rest of the world, with increasing dependency on imported grain. It is expected that there will be a shift from livestock being kept for multiple purposes and local food supply to animals being raised under factory farming conditions for export. Many small-scale farms will be out-competed and replaced by large-scale industrial farms. (Delgado et al 1999).

The Livestock Revolution suggests that by 2020 developing countries will go from sustainable small - scale animal farming to industrial animal production. However, in South Africa, research is now underway to look at a return to extensive farming of well - adapted indigenous breeds

Previous expectations were that the Livestock Revolution would provide new opportunities for agriculture in the South. However, as Janice Cox and Sari Varpama poignantly ask in their CIWF commissioned report, is the Livestock Revolution a development solution or the path to destruction? (Cox and Varpama 2000). Since the Cox/Varpama report great consideration has been given to important factors such as the cost to small farmers, food security, the environment, farm animal genetic diversity, and farm animal welfare. More research has been undertaken that makes clear the consequences.

Small farmers are losing

Some of the leading agencies working on hunger alleviation are beginning to share CIWF's concern that small farmers are being pushed out of business by industrial animal agriculture. The World Bank, for example, recently concluded that as the livestock sector undergoes rapid growth " there is a significant danger that the poor are being crowded out, the environment eroded and global food security and safety compromised." (World Bank 2001) Farmers in the UK, US and Europe have already experienced the consequences of the 'vertical integration' of livestock production, in which specialised enterprises, such as feedlot farms, animal feed suppliers, and meat packers, all merge under one giant company. This leaves very limited market opportunities for small, independent farmers, many of whom have been forced to leave the business altogether. This leads to urban migration, exacerbating urban poverty and overcrowding and causing rural depopulation and decay. According to the US Department of Agriculture, in 1950 there were 5.7 million farms in the USA. Today, the number has decreased to about 2 million farms.

This same pattern is quickly taking hold in Southern countries. Brazil's poultry industry is a good example. Between 1970 and 1991, Brazil's poultry industry grew from small backyard farmers to a multi-national mechanised industry, becoming almost entirely vertically integrated. Originally, small family farmers were given day old chicks by major companies and were paid to raise them. Sadia, a family-owned company, employed 14,000 smallholder farmers to raise chickens on their mixed farms with a clear benefit to these farming families. The chickens were brought back to Sadia, who processed and distributed them to consumers.

Small farmers are displaced by industrial broiler production in Brazil

Unfortunately, this system began to change four or five years ago, due to financial troubles of family owned companies, such as Sadia, which were taken over by financial interest groups and foreign companies. Now, Sadia is raising, providing feed for, and processing its own chickens in large production units. Certainly, most of the 14,000 mixed farmers, who once raised chickens for the Sadia industry, do not benefit from this new 'development' initiative. Indeed although contract farming is often touted as a solution for small scale farmers, in reality contract farmers remain vulnerable to the ups and downs of business. In hard financial times or times of over-supply contract farmers are the first to be forced to quit.

Harm to import-dependent developing countries

There are many examples that support the view that the introduction of industrial livestock rearing not only harms the individual small-scale farmer but also the developing countries as a whole. As a consequence of industrial livestock rearing, these countries have become more import-dependent: grains, tractors, fuel, fertilisers and special animal units and processors are required for industrial livestock business, none of which a developing country starts out by making itself.

Industrial meat chicken farming is expanding to Thailand

Over the last decade, Asia has begun to import large amounts of grain to feed its industrially produced farm animals. Likewise, machinery, oil and production units are being imported and subsidised by the government. The Asian economic crisis of 1999, which raised prices of imported feeds and depressed urban demand, proved that being an import-laden economy can be disastrous and unsustainable.

Threat to food security

A *World Poultry* study (Gueye 2001) carried out in sub-Saharan Africa indicates the importance of family-level poultry rearing for food security, poverty alleviation, environmental health and genetic diversity. While the one or two breeds of broiler chicken used for chicken meat in factory farms are generally imported, 85% of rural families keep poultry of several species and breeds of poultry of indigenous types. The products of these local breeds are often preferred over exotic breeds by local consumers. Furthermore, the local breeds are better adapted to local diseases, pests and climate. Poultry are usually raised in extensive systems, while some families specialise in semi-extensive and small-scale intensive poultry systems.

In extensive production systems, birds are reared with little land, labour or capital, and can be accessed by even the poorest social communities in rural areas. Those are of great importance for women, especially in female-headed households. The study indicated that an average flock of 5 chickens enabled a woman in Central Tanzania to earn an additional US$38 per year or a 9.5% increase in income. Poultry raising has contributed to the 'greater empowerment of women by improving their financial status, if socio-cultural and religious environments allow it'. As such, the loss of family farming to industrial farming could seriously affect family food security, and particularly women and children.

Industrial animal agriculture ploughing forward in developing countries

Despite the information now on the negative impact on food and job security in developing countries, industrial animal farming is ploughing forward at an alarming pace. For example, Pakistan's federal cabinet recently approved the introduction of "Corporate Agriculture Farming(CAF)." Dr Abid Quiyum Suleri of the Sustainable Development Policy Institute in Pakistan wrote this was agreed "despite warnings from NGOs and the Advisor to the President on Food, Agriculture and Livestock that this would hurt small farmers (with exception to a few large landholders, about 94 percent of farmers in Pakistan are small landowners and tenants) and diminish national food security." (Suleri 2002). China's animal agriculture is also expected to change rapidly over the next few years with its recent introduction into the World Trade Organisation. At the moment, only 20% of Chinese animal agriculture

Free range meat chickens in Brazil.

uses modern technology, and the remaining 80% is produced on small family-owned farms. Some 477 million producers raise China's pigs alone. (Roppa 2001). However, this is set to change if the Livestock Revolution develops in China as planned. Already, corporate interests have their eye on the country. For example, in November 2002 an international meeting for any interested parties will be held in Shanghai specifically on meat production and on expanding China's global animal production market.

The Livestock Revolution must be curtailed before the current crisis of 800 million hungry further intensifies. Protecting individuals in developing countries who carry out humane and sustainable farm animal rearing has potential for alleviating hunger, whereas factory farming will almost certainly exacerbate the current hunger crisis. Above all, there is a pressing need for policy to prevent agribusiness from reaping private profits at the expense of developing countries' environment, genetic diversity and poverty alleviation.

Effects on the environment

Industrial animal agriculture was developed in Europe with the aim of ending food shortages after the second World War. Science and technology were promoted, farmers were given subsidies to encourage production, and consumers benefited from cheaper food. But, these policies of production at all costs can no longer be supported. As far back as 1997, the chief of the FAO's Asian Pacific Regional Office declared that it was time to move away from the 'Green Revolution' livestock model, as the environmental problems of this approach were already obvious.

Industrial animal farming has proved to have detrimental effects on the environment both in the short and the long term. (Haan et al 1998). For example, the production of cereals for the livestock industry often takes place far away from where the animals are raised. This is leading to depletion of soil fertility where cereals are produced and pollution at the other end of the trading spectrum where cereals are used for animal feed. Soya and maize are major products of the US, and are supplied to industrial animal farms around the world. Such monoculture systems, though strongly promoted by governments in the past, have unintended consequences for soil and water quality. Thirty per cent of the total cropland in the United States is now eroding at excessive rates, according to the Soil and Water Conservation Society.

Globally, farm animals produce 13 billion tonnes of waste per annum. (Turner 1999). Animals on industrial farms consume high-protein feeds and produce waste that is extremely damaging environmentally. Industrial animal farming contributes 5-10% of the total of greenhouse gases in the world, accelerating climate change. Moreover, large amounts of water and fossil energy are required to grow, process and transport industrial farm animal feed and treat the animal waste. (Pimentel et al 1997).

There are also concerns about the efficiency of giving animals feed that could be feeding hungry people. The World Health Organisation (WHO) and the Food and Agriculture Organisation (FAO) of the United Nations, in a recent draft document, have made clear their concern regarding increased animal product consumption, especially in developing countries, and the burden it will have on the land, the environment and on feeding people at a global level. They state:

The increase in the consumption of animal products in countries such as Brazil and China (although still well below the levels eaten in North American countries and most other industrialised countries) also has considerable environmental repercussions. The number of people fed in a year per hectare ranges from 22 for potatoes and 19 for rice down to 1 and 2 people respectively for beef and lamb. Likewise, water requirements are likely to become a major issue during this century. Animal products again use far more of this resource than vegetables need to grow. (WHO/FAO 2002).

Internationally important organisations such the WHO, the FAO and the World Bank are all becoming concerned about the impact that raising animals industrially instead of crops has on the land and our ability to feed the world efficiently. And for a world of 800 million hungry people, this efficiency is crucial.

Loss of genetic diversity

The FAO (2001) reports that the greatest threat to the world's domestic animal diversity is the export of specialised breeds of farm animals from developed to developing countries. Crossbreeding with, and eventual replacement of local breeds has resulted in a

situation where around 1,350 domestic animal breeds (30%) are at risk of extinction. Every week, two farm animal breeds disappear.

One of the greatest misjudgements of the 'Livestock Revolution' is to deny the importance of genetic diversity for food security. Nearly 12,000 years of domestication and breeding under different environments have resulted in some 4000 farm animal breeds. The genetic diversity of these breeds has made it possible for humans to thrive in all corners of the globe, facing a range of environmental challenges including varied climates, diseases, parasites and pests. Unlike imported industrial breeds, local farm animals in given environments have developed resistance or adaptations to these challenges.

For example, in Rajasthan, India, non-industrial farm animal breeds have benefited human food security even in a harsh desert climate, where temperatures can rise to 50° C. This region counts seven local breeds of cattle, eight breeds of sheep, four breeds of goat, as well as camel and horse breeds. Through these local breeds, Rajasthan significantly contributes to the national milk and wool output. Marginal lands can contribute to food security only by working with farm animals adapted to local climatic conditions. (Rathore et al 2001).

Traditional breeds rather than imported breeds of cattle used in the Gambia

Government interventions in Rajasthan have focused on 'improving' local breeds by crossbreeding them with exotic breeds from other climates – mainly with a view of increasing yields. Not surprisingly, the crossbreeding of local sheep with exotic sheep has failed to achieve any improved yield, mainly due to high mortality and problems with feed supply. In the case of cattle, the government has realised the detrimental effects of crossbreeding, and in 1998 revised its policy to protect and improve local breeds.

Industrial animal agriculture compromising human health and food safety

Industrial animal farming has wide-ranging implications for human health and food safety. In recent years, a global awareness has arisen of the health risks associated with food borne diseases, almost exclusively borne by animal products. The United States Department of Agriculture, (USDA) in their September 2001 Food and Agriculture Policy reported " widely publicised outbreaks of food borne illness - traceable to such sources as E.coli O157:H7 in hamburger, Listeria monocytones in hot dogs, and Salmonella in Poultry and eggs – have raised public concerns about risks from microbial pathogens in food." Additionally, they mention concerns about the emergence of pathogens such as Cyclospora, Cryptosporidium and new stains of Salmonella. (USDA 2001). Other human infections linked to the consumption of meat include Campylobacter, new variant Creutzfeldt-Jacob Disease (nvCJD- the human equivalent of mad cow disease, Bovine spongiform encephalopathy (BSE)), and avian influenza (virus H5). These various infections cause a range of outcomes from as minor as nausea to as serious as death.

Factory farming and the industrial scale processing of meat and meat products open the way to infectious disease. Farm animals are often kept in overcrowded, poorly ventilated, dirty conditions - prime conditions for the spread of disease. Additionally, the animals are often fed unnatural feed, which has been linked to the spread of diseases such as BSE. Until the recent BSE scare, animals were regularly fed meat and bone meal (MBM) from their own or from other species. Although this has recently been banned in the EU due to fears about BSE, it is still a practice carried out in many parts of

the world – after introduction by industrial producers. The use of high throughput slaughter systems has also led to contaminations, such as faeces in beef leading to E.coli poisonings, and cross-contamination as carcasses from many different animals are mixed together to create some types of meat products. For example, one hamburger patty may contain meat from a large number of cows.

In addition to contaminated carcasses, there is also global concern for the emergence of antibiotic resistant bacteria. Due to crowding animals into confined and enclosed spaces, animals are often given prophylactic antibiotics in order to prevent the bacterial infections that could spread through a flock or herd. The routine growth promoting and/or prophylactic use of antibiotics in industrially produced farm animals has been linked to the rise in antibiotic resistance. For example, the Advisory Committee on Microbiological Safety of Food (ACMSF) has stated "giving antibiotics to animals results in emergence of some resistant bacteria which infect humans." (ACMSF 1999). Additionally, antibiotics are used as growth promoters in animals, where they act to improve feed conversion.

Modern medicine relies heavily on the ability of antibiotics to overcome bacterial infections in humans. This important tool is being compromised by the overuse of antibiotics in industrial animal farming. The more that antibiotics are used in farm animals, the more exposure the bacteria have to the antibiotics. And the more exposure the bacteria have, the more likely it is that a mutant will emerge and persist. This is a serious risk to human health, as scientists have been unable to create any entirely new antibiotics for around twenty years.

Food safety risks in developing countries

As industrial animal agriculture spreads into developing countries, the negative impact on human health and food safety impact often follow. Recently, Compassion in World Farming (South Africa) took randomly selected chickens, sold live to residents in Khayelitsha, a deprived community near Cape Town, to the University of the Western Cape (UWC) for testing. These chickens were from factory farms, primarily laying hens that were no longer good for production (end of lay hens) but also not suited for meat in the main market. The tests revealed that the chickens were contaminated by a range of disease-causing bacteria. This kind of bacteria, if ingested, could cause severe bloody diarrhoea, vomiting, skin ulceration, abscess formation, and even typhoid fever. Gwen Dumo, a community health worker in Khayelitsha, confirmed that large numbers of people she attended complained of seemingly inexplicable bloody diarrhoea and skin ulceration problems. Furthermore this bacteria showed 100% resistance to commonly used antibiotics. This means that certain antibiotics would be useless in the treatment of people becoming sick from eating the chickens with the bacteria. It goes without saying that people with depressed immunity through AIDS or other illnesses are at particular risk from this. (CIWF South Africa 2001).

Industrially laying hens, whose meat is often sold to rural communities when they are no longer good for egg laying, South Africa.

As a result of food poisoning and antibiotic resistance, there is strong and worrying evidence that industrial animal production is a serious threat to human health and food safety at a global level.

Nutrition and industrial animal agriculture

As the threat of infectious diseases has declined in affluent populations, the toll of chronic diseases related to the Western lifestyle has increased. Much of this is related to diet. The FAO and the WHO state in a recent (2002) draft document on the global increase of chronic disease that "Diet has been known for many years to play a key role as a risk factor for

NCDs *(non-communicable diseases)*." Like those who under-eat, those who over-eat can also suffer from malnutrition and various health problems. While the FAO report that 800 million people are malnourished though under eating, there are 1.2 billion people in the world who are overeating and suffer deficiencies of vitamins and minerals. In the mid-1990s, 56% of the children in Bangladesh and 48% of the children in Ethiopia were underweight, compared to 55% of the adults United States and 51% in the United Kingdom were overweight. (Worldwatch 2000).

Industrial animal farming is often promoted as essential to meet the high demands for animal products and consumption patterns of populations. But consumption choices within these populations are not necessarily consistent with nutritional or health goals. Advertisements, health organisations, policymakers and culture all influence what and how much people decide to eat. The present high demand for animal products in affluent populations is not a healthy trend.

- 300 million adults worldwide suffer from obesity. Over-consumption of animal products is linked to obesity, which is linked to both diabetes and coronary heart disease.
- By 2020, coronary heart disease will globally be the number one cause of disease. The most important and well-established diet related risk factors of coronary heart disease are high serum cholesterol, high blood pressure and high BMI (body mass index). These are all related to over-consumption of animal products.
- The over-consumption of animal products is related to various common cancers. Cancer risk is reduced by appropriate diet. The World Cancer Research Fund recommends, "predominantly plant-based diets rich in a variety of vegetables and fruits, pulses and minimally processed starchy staple foods." (WCRF 1999)

Chronic non-communicable diseases are set to rise in developed and developing countries. They are forecast to be a major cause of health problems for global health authorities., with serious budgetary implications for the future.

The need to teach sustainable consumption patterns

At present, only a negligible minority of the world's population consume the recommended average of 400 grams per day of fruit and vegetables. (WHO/FAO 2002) Simultaneously, the trends for global meat consumption show an alarming increase, and are disproportionately distributed, as can be seen in the table below, taken from the 2002 United Nations Environmental Programme (UNEP) "Global Environment Outlook 3".

From this table, it is clear that the meat consumption patterns in individuals of North America are alarmingly higher than those in the rest of the world. By comparison, Africans consume less than 10% of the North American meat consumption on average, and Europe, the second highest consumer of meat, is at half the North American meat consumption. These patterns of consumption must be addressed, as non-

Average regional consumption of meat in kilograms per person annually

GEO REGION	1975	1980	1985	1990	1995	2000
North America	98.1	106.0	106.5	111.3	124.0	132.7
Latin America + Caribbean	38.0	43.9	43.2	45.5	53.9	59.8
Europe	65.6	70.4	73.6	78.1	66.9	65.4
Africa	13.4	14.2	14.1	13.9	13.3	13.3
Asia + Pacific	11.1	13.1	15.3	18.5	23.4	27.5
West Asia	11.5	14.7	20.5	19.5	17.6	18.2
Polar	7.6	11.0	10.6	10.4	10.9	10.8

Data Source: FAOSTAT (Data as of May 2001)

communicable diseases in the United States continue to be a leading cause of death.

There is a further concern that as countries pass through the development transition, patterns of consumption that lead to chronic disease burdens will be taken up in developing countries. There is already evidence that such patterns are taking hold. It is therefore crucial that a concerted *global* approach is taken on teaching sustainable consumption patterns – that is optimum nutrition based on a predominantly plant – based diet. With the richest 20 per cent of the world population as accounting for 86 per cent of total personal consumption expenditure, sustainable consumption patterns should clearly be a priority[120].

Policymakers must urgently work to influence the unhealthy patterns of over - consumption of animal products that predominate in affluent populations.

Refuting the "meat only" solution to malnutrition

Likewise policymakers must remain aware that promoting animal products is not the 'solution' to malnutrition. In the past, the WHO intervention programmes have relied heavily on fortification with micronutrients and supplements. The WHO, the leading health organisation with regard to knowledge on malnutrition, has made it clear that animal products are one in a whole range of approaches that can be taken. The animal product solution has not been taken up with any enthusiasm by WHO intervention programmes. The WHO has also made clear that animal products are not always a practical solution to malnutrition as accessibility to these products by many of the poor is problematic. Also there may be cultural or religious limitations to promoting meat. The WHO states that more realistic sources of micronutrients, such as fortification programmes, are more accessible solutions in many cases. (WHO/FAO 2002). While animal products can clearly provide a health benefit to malnourished groups (as can increased consumption of vegetables, fruit and legumes), it is important that they are not seen as a 'solution'. Meat promotion should not be a 'policy.' Appropriate and realistic solutions must be applied if malnourishment is to be tackled, and healthy and sustainable eating patterns developed.

Negative impact on farm animal welfare

Another negative impact of industrial farming is its impact on farm animal welfare. As recognised by the European Union in a Protocol to the Treaty of Rome (the EU founding document), farm animals are sentient creatures capable of feeling pain and suffering. Industrial animal farming often closely confines the animals indoors, without light and with little or no exercise. This inhibits the natural behaviour of animals, and is known to create aggression, stress and injuries. Industrial animal farming also carries out standard practices of mutilation: for example, the hen is debeaked, so that she can no longer peck her cage mate, and the pig is tail-docked, so that his bored pen mates can no longer bite his tail.

European law recognises animals are sentient beings. (Bullock in India)

The surroundings of industrial animal farms can be dirty and poorly ventilated, leading to poor animal health. Moreover, selective breeding for large muscles and fast growth, especially in pigs and chickens raised for meat, leads to leg problems, cardiovascular inadequacy, poor welfare and increased risk of mortality.

Leading international agencies are now beginning to recognise the impact industrial animal farming is having on animal welfare and take action against it. For example, the Food and Agriculture Organisation (FAO) of the United Nations has recently amended its mission to include animal welfare and drafted an animal welfare policy. Many CIWF suggestions have been incorporated in these documents. The FAO has also drafted 'Good Agricultural Practice" guidelines which includes a comprehensive section on farm animal welfare, again under CIWF consultation. Equally, following a CIWF presentation, the World Bank has agreed to establish an animal welfare working group for development. The United Nations Environment Programme (UNEP) has also taken steps to recognize the need for good animal welfare. The agency has recently accepted two proposals for an international declaration on animal welfare – one proposed by the World Society for Protection of Animals (WSPA) for an international declaration on animal welfare and one by the International Fund for Animal Welfare (IFAW) for an international meeting on animal welfare. It now appears that an official international meeting will consider the declaration drafted by WSPA. The International Epizootics Organisation (OIE) has now agreed to include animal welfare under its remit. The UK's Department for International Development (DFID) has undertaken an important study on animal welfare and development and will also fund a FAO study on the impact of factory farming on poor communities. The World Bank, in a publication on livestock development, stated that "unbridled development of industrial production systems – high density batteries for broilers and layers and sow tethering for intensive pig production – are likely to induce the use of livestock rearing techniques unfriendly to animals." (World Bank 2001).

Certainly the time has come when farm animal welfare can no longer be ignored. It is now recognised that industrial animal agriculture compromised farm animal welfare.

Conclusion – Policy implications

In superficial economic calculations, industrial animal farming is considered the cheapest and most productive form of animal production. But, these calculations do not include the 'total costs' of this production system. Industrial animal production looks viable only when selected aspects of the production – consumption system is viewed. In reality, the hidden costs of industrial animal production for future generations are enormous. It is therefore very important that policy decision-makers examine questions such as: Is it acceptable to cause job losses by putting small-scale farmers in poverty stricken populations out of business? Is it acceptable to cause ecological degradation, environmental pollution, climate change and increased ozone layer depletion? Is it acceptable for food consumption patterns to increase the risk of cancer and obesity on one side of the scale and starvation on the other? Is it acceptable to cause unnecessary pain and suffering to farm animals?

The UK, for example, has been struck by diseases such as foot and mouth disease and mad cow disease (BSE) that has brought industrial animal farming system under serious questioning by the public. The incidence of food poisoning connected with eating animal products is higher than ever in the UK, leaving consumers to doubt the safety of industrial animal products. More and more consumers are turning away from the products of industrial animal farming towards the products of more sustainable systems, such as organic and free-range. The governments in Europe are now beginning to recognise this situation and the value of more quality-driven livestock production. The Netherlands government, for example, has recently started to subsidise organic pig production by 30%.

Food security, rural structure, the environment, food safety, human nutrition and animal welfare are all put at risk by the present continued support for industrial animal farming. The evidence demonstrates that industrial animal farming is an unsustainable form of food production. Two fundamental policy changes are urgently needed.

First, current unsustainable levels of animal products consumption by affluent populations must be addressed by policy makers. Affluent populations must be guided to eat less animal products. Second, policy makers must also support more sustainable and humane forms of food production, one that is quality rather that quantity driven. These two changes would have widespread benefits to food security, rural structure, the environment, food safety, nutrition and animal welfare.

The Netherlands government recently started to subsidise organic pig farming by 30%.

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Compassion in World Farming Trust is an educational charity working internationally to advance the welfare of farm animals. We carry out detailed research using the academic literature and publish educational resources for use by schools, universities and the general public on farm animal welfare and associated environmental, social and ethical issues. Our publications include reports, books, videos, factsheets and teaching materials.

CIWF Trust cooperates with organisations and individuals in many countries. Our current key issues include animal sentience and an assessment of the impact of the World Trade Organisation on farm animal welfare globally. The Trustees are grateful to several Grant Making Charitable Trusts and members of the public who have made work in these areas possible. A complete list of our available materials and downloadable versions can be found at www.ciwf.co.uk.

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