100 facts in 14 themes linking people, food and the planet

FAO and Post•2015
Nourishing people, Nurturing the planet
Background

Food is life. It is the fundamental connection between people and the planet. The fruits of the earth have long sustained us, but there are increasing signs that our way of working the land and ensuring all are nourished will have to be revisited.

Based on the Food and Agriculture Organization (FAO)’s 14 themes of focus in the post-2015 development agenda, these 100 facts shine a light on the connection between food security, sustainable agriculture and use of natural resources.

The post-2015 development agenda is a United Nations member state-led process that will define a global framework to succeed the Millennium Development Goals (MDGs) after 2015.

FOOD SECURITY AND THE RIGHT TO FOOD

1. 805 million people in the world, 11.3 percent of the world population or one in nine, suffer from hunger.

2. The number of hungry has fallen by more than 100 million over the past decade and by 209 million since 1990–92.

3. One in four people living in sub-Saharan Africa suffers from chronic hunger, but the region with the largest number of undernourished is Southern Asia (276 million).

4. The world has the capacity to produce enough food to feed everyone adequately.

5. The right to food goes beyond a moral obligation; it is enshrined in international law.

6. Agricultural production will have to increase by an estimated 60 percent by 2050 to meet projected demands for food and feed from a world population calculated to rise to over nine billion people by 2050.

7. Food insecurity continues to be predominantly concentrated in rural areas.

8. The poor — rural and urban — spend as much as 70 percent of their income on food.

9. By 2030, 60 percent of the world’s population will live in cities, with most urban expansion taking place in the developing world.
10. An estimated 161 million, 27 percent or more than one in four children under the age of five are stunted (too short for their age) due to chronic undernutrition.

11. More than two billion people suffer from one or more micronutrient deficiencies or “hidden hunger”.

12. About 1.4 billion adults (aged 20+) are overweight, of whom 500 million are obese.

13. Some 6.3 million children under the age of five died in 2013. About 45 percent of all child deaths are linked to malnutrition.

14. Malnutrition is the single largest contributor to disease in the world.

15. Loss of productivity and direct health care spending associated with malnutrition may account for as much as 5 percent of global GDP, equivalent to USD 3.5 trillion a year.

16. It is not uncommon for both undernutrition and obesity to co-exist within the same country, household or even individual, referred to as the multiple burden of malnutrition.

17. The Millennium Development Goal (MDG) target of halving extreme poverty by the end of 2015 has been met, but progress has been uneven, with a few Asian countries, primarily China, accounting for most of the decline.

18. The rate of poverty reduction has been much slower in low-income countries, especially in sub-Saharan Africa where the absolute number of poor has risen.

19. An estimated 1.2 billion people in developing countries still live in extreme poverty.
20. Poverty is predominantly rural. Seventy-eight percent of the world’s extreme poor live in rural areas, with the majority dependent on agriculture.

21. Deteriorating ecosystems, unsustainable natural resource management and climate change disproportionately affect the poor.

22. Almost 60 percent of child labour worldwide is found in agriculture.

23. The gap in years of schooling between poor women and men is more than double that of the non-poor.

**RESILIENCE**

24. Resilience is the ability of people, communities or systems that are confronted by disasters or crises to withstand damage and to recover rapidly.

25. Some 2.5 billion smallholder farmers, fishers, tree-dependent communities, livestock owners, and small entrepreneurs are often the worst affected when a crisis or a disaster strikes.

26. The recurrence of disasters and crises undermines nations’ efforts to eradicate hunger and malnutrition and to achieve sustainable development.

27. Over the past 12 years (2000–12), disasters have caused an estimated USD 1.3 trillion in damages, causing the loss of life of 1.1 million people and affecting another 2.7 billion.

28. In 2012, disasters caused economic losses estimated at USD 138 billion, marking the first time that annual economic losses have exceeded USD 100 billion in three consecutive years.
SOCIAL PROTECTION

29. Only 27 percent of the world population enjoys sufficient social protection. Half of the world are excluded.

30. Only a small fraction of the 805 million hungry have access to some form of social protection, including safety net programmes. Most of them live in rural areas and depend on agriculture.

31. Without access to risk-mitigation or risk-sharing instruments, poor rural families are more likely to sell off their assets, shift to less risky but lower yielding crops, and require their children to work.

32. Social protection tends to stimulate the local economy, with positive effects on agricultural production, rural employment and poverty reduction.

33. Social transfer programmes that combine income support with better access to social services have greatly reduced malnutrition and enhanced income-generating capabilities.

34. Social protection is proven to be a financially affordable tool for all countries. The cost of Brazil’s successful Bolsa Familia programme is less than 1 percent of national income.

CLIMATE CHANGE

35. Agricultural production may fall by as much as 2 percent each decade for the rest of this century as a consequence of rising temperatures.

36. About 20-30 percent of species are likely to be at an increasingly high risk of extinction once global mean temperature exceeds pre-industrial levels by two or three degrees centigrade.

37. Agriculture and deforestation account for about a quarter of global greenhouse gas emissions from human activities.
38. From farming to forestry and fisheries, agriculture greenhouse emissions have nearly doubled over the past 50 years and may increase by another 30 percent by 2050.

39. Forests and forest land currently retain as much carbon as in the whole atmosphere. Conserving and enhancing forests are one of the best measures to address climate change.

ECOSYSTEMS AND BIODIVERSITY

40. Biodiversity’s genetic component provides the variation needed to increase food production, enhance its quality and adaptability to environmental and socio-economic conditions.

41. Useful and nutritious varieties and breeds are being lost, or their genetic pool is being eroded, mainly caused by unsustainable use or lack of use.

42. Of the 8 300 livestock breeds known, 8 percent are extinct and 22 percent are at risk of extinction.

43. Only four edible plants – wheat, rice, maize and potatoes – provide 60 percent of the world population’s energy intake.

44. In aquaculture, 10 out of 600 farmed food fish and algae species account for half of the production.

45. Poultry birds now account for over 80 percent of all livestock.

46. Forests contain over 80 percent of the world’s terrestrial biodiversity.

47. Less than 1 percent of the 80 000 tree species in the world have been studied for their use in any depth.
ENERGY

48. Food systems currently consume 30 percent of the world’s available energy.

49. Seventy percent of the energy consumed by food systems occurs after food leaves farms, in transportation, processing, packaging, shipping, storage, marketing, etc.

50. An estimated one-third of the food we produce is lost or wasted, and with it an estimated 38 percent of energy consumed in food systems.

51. Modern food systems are heavily dependent on fossil fuels.

52. Nearly one in five people (1.4 billion) around the world do not currently have access to modern electricity services.

53. Approximately three billion people rely on traditional biomass for cooking and heating, with adverse effects on health, the environment and economic development.

FISHERIES, AQUACULTURE, OCEANS AND SEAS

54. Worldwide nearly three billion people receive 20 percent of their daily animal protein intake from fish.

55. Fish imports rose by 108 percent from 2002–12 with developing countries representing 54 percent in total fishery exports by value.

56. Half of food fish produced nowadays comes from aquaculture, one of the fastest growing animal food producing sectors, with millions of people depending on it directly or indirectly.

57. 29 percent of commercially important assessed marine fish stocks are overfished (fished at a biologically unsustainable level), 61 percent fully fished and 10 percent underfished.

58. Per capita fish consumption has soared from 10 kg in the 1960s to more than 19 kg in 2012.
59. The share of fisheries production used by humans for food has increased from about 70 percent in the 1980s to a record high of more than 86 percent (136 million tonnes) in 2012. The rest is mostly processed into fishmeal and fish oil.

## FORESTS AND MOUNTAINS

60. Forests make vital contributions to biodiversity and provide myriad environmental goods and services. They act as a source of food, medicine and fuel for more than a billion people.

61. Forests cover 31 percent of global land area.

62. Three-quarters of the freshwater used for household, agricultural and industrial needs is provided through forested watersheds.

63. In 10 years (2000–10), around 13 million hectares of forests were converted each year to other land uses or lost through natural causes.

64. The formal forestry sector employs some 13.2 million people across the world and at least another 41 million are employed in the informal sector.

65. Over half of all wood produced in the world is used for energy.

66. A third of all households, or about 2.4 billion people, use wood as their main fuel for cooking. 764 million may boil their water with wood.

67. Forest products make a significant contribution to the shelter of at least 1.3 billion people, or 18 percent of the world’s population.

68. Mountains cover almost a quarter of the earth’s land area. They are home to more than one tenth of the world’s population.

69. Mountain peoples are among the world’s poorest and hungriest: in developing countries, the vast majority live below the poverty line and are food-insecure.

70. Mountains are the major storehouses of the freshwater that sustains life on earth, providing 70 percent of the world’s freshwater resources for domestic, agricultural and industrial consumption.

71. Mountains host approximately 25 percent of terrestrial biodiversity and virtually a quarter of the world’s forests.
LAND AND SOILS

72. Soil is non-renewable – its loss is not recoverable within a human lifespan.

73. Soil is essential for life, providing nutrients, water and minerals to plants and trees, and is home to billions of insects, bacteria and small animals.

74. A quarter of land is highly degraded and a further 44 percent of land is slightly or moderately degraded due to the erosion, salinization, compaction and chemical pollution of soils.

75. Soil is a reservoir for at least a quarter of global biodiversity.

76. Efficient soils provide the largest store of terrestrial carbon; their preservation could contribute to climate change mitigation.

SUSTAINABLE AGRICULTURE

77. The world land area dedicated to agriculture is 38.5 percent.

78. Up to 75 percent of crop genetic diversity has been lost and 22 percent of animal breeds are at risk due to land degradation.

79. Farmers in low/middle-income countries invest four times more in farms than their governments invest in the agriculture sector.

80. More than ninety percent (500 million+) of all farms are family farms, producing most of the world’s food.

81. Some 1.8 million producers in 162 countries produce organic products, including crops, livestock, fish and wild harvested products.

82. Women account for an estimated two-thirds of the world’s 600 million poor livestock keepers.
83. Total emissions from global livestock represents 14.5 percent of all anthropogenic GHG emissions.

84. Cattle are the animal species responsible for the most emissions, representing about 65 percent of the livestock sector’s emissions.

**TENURE RIGHTS**

85. Tenure rights represents the recognition by society entitling specific people to use or control certain natural resources: from ownership to gathering firewood or foraging tree crop plants.

86. The eradication of hunger and poverty and the sustainable use of natural resources depend in large part on how people gain access to land, fisheries and forests.

87. In the past few decades, land reforms have contributed to reducing gross inequality of access to rural land rights with some 1.5 billion people less poor and tenure rights strengthened.

88. As more areas are cultivated to provide food for a rapidly growing world population, there is increasing pressure on land and other natural resources and tension over tenure rights.

89. Many tenure problems arise because of weak governance, and attempts to address them are affected by the quality of governance.
90. Since 1990, well over two billion people have gained access to improved sources of drinking water, and 116 countries have met the MDG target for drinking water supply.

91. More than 700 million people still remain without access to improved sources of drinking water, nearly half of whom are in sub-Saharan Africa.

92. Some 2.5 billion people do not have access to adequate sanitation.

93. In the 20th century, water use grew by more than twice the rate of population increase.

94. In the coming decades, one-third of the world’s population – many living in the semi-arid regions of Asia and in sub-Saharan Africa – will experience severe water scarcity.

95. Two-thirds of the world population could be living in water-stressed countries by 2025 if current consumption patterns continue.

96. About two billion people worldwide depend on groundwater, which includes about 300 transboundary aquifer systems.

97. Agriculture is by far the largest user of water, accounting for almost 70 percent of all water withdrawals, and up to 95 percent in developing countries.

98. While irrigated agriculture represents 20 percent of total cultivated land, it contributes 40 percent of total food produced worldwide.

99. The demand for water for irrigation is projected to increase by 55 percent by 2050.

100. Depending on the diet, from 2 000 to 5 000 litres of water are needed to produce the food consumed daily by one person.

* This document draws on statistical information presented in the most recent reports of the Food and Agriculture Organization (FAO) and other specialized agencies and entities of the United Nations.
OUR PRIORITIES
The FAO Strategic Objectives

Achieving FAO’s goals to end hunger and poverty is a challenging and complex task. Today, thanks to major changes in how we do business, FAO is a fitter, flatter and more flexible organization, whose activities are driven by five strategic objectives. The new and improved FAO has a real chance to win the battle against hunger, malnutrition and rural poverty.

HELP ELIMINATE HUNGER, FOOD INSECURITY AND MALNUTRITION
We contribute to the eradication of hunger by facilitating policies and political commitments to support food security and by making sure that up-to-date information about hunger and nutrition challenges and solutions is available and accessible.

MAKE AGRICULTURE, FORESTRY AND FISHERIES MORE PRODUCTIVE AND SUSTAINABLE
We promote evidence-based policies and practices to support highly productive agricultural sectors (crops, livestock, forestry and fisheries), while ensuring that the natural resource base does not suffer in the process.

REDUCE RURAL POVERTY
We help the rural poor gain access to the resources and services they need – including rural employment and social protection – to forge a path out of poverty.

ENABLE INCLUSIVE AND EFFICIENT AGRICULTURAL AND FOOD SYSTEMS
We help to build safe and efficient food systems that support smallholder agriculture and reduce poverty and hunger in rural areas.

INCREASE THE RESILIENCE OF LIVELIHOODS FROM DISASTERS
We help countries to prepare for natural and human-caused disasters by reducing their risk and enhancing the resilience of their food and agricultural systems.
FAO and the Post-2015 Development Agenda
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