

8. CIVILISATION AND TRADITION IN WORLD DEVELOPMENT

Civilisation includes both spiritual and material achievements of a society. A major role in creating civilisation and how it functions has been played by religions and their value systems. They show patterns in human relations with one another and with the world.

This is particularly important in the modern world in which a significant role is played by the free market and globalisation.

It's interesting!

- **The Swiss** demand high quality, functional and durable goods. They avoid risk, value punctuality, precision, safety and permanent rules. These features allow the Swiss to compete effectively in banking, insurance and transport.
- **The Swedish** value safety, environmental protection and social development. This is shown by Volvo, the first company to apply the three-point vehicle seat belt worldwide.

An **economy** relies on production, distribution and consumption of goods and services. It is aimed primarily at meeting material needs. Economic activities always take place in particular social and historical contexts and have an impact on society and culture. The cultural characteristics of a society can influence factors shaping national production and markets.

● Major world civilisations

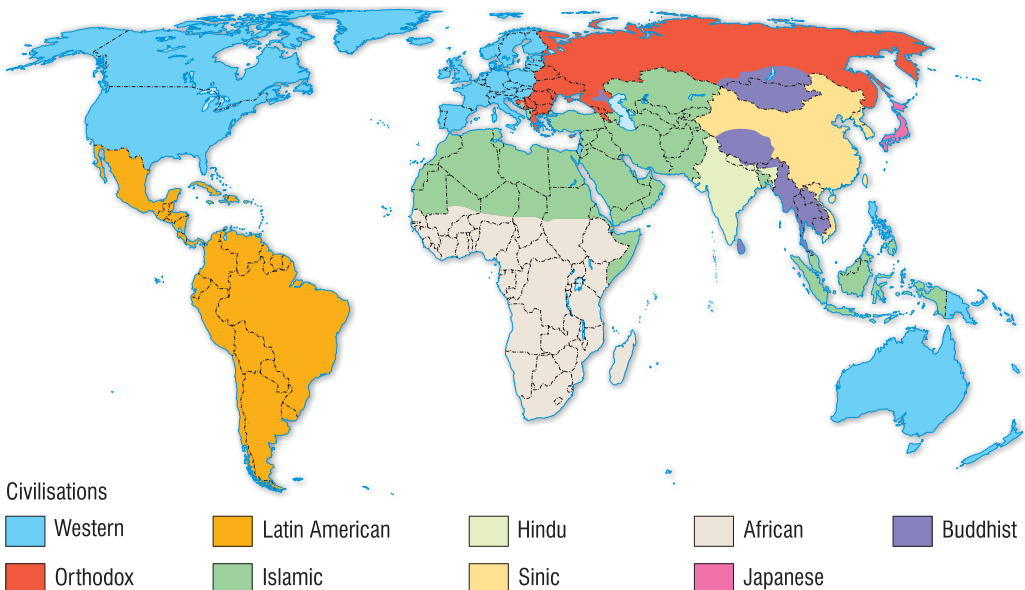


Fig. 33. Location of major civilisations

Source: Samuel P. Huntington, *The clash of civilizations and the remaking of world order*, 1996

There are nine major civilisations with different traditions and norms for co-existence; together these form both group and personal identities. They are **Western, Orthodox, Japanese, Sinic, Hindu, Islamic, Latin American, African and Buddhist.**

Western civilisation has a cultural and religious heritage derived from both Catholicism and Protestantism. It is characterised by the separation of secular from religion authority, acceptance of Roman law, individualism and social pluralism. It is found in countries of Western and Central Europe, the United States and Canada as well as in Australia and New Zealand.

It includes MEDCs which have great military power but form a relatively small proportion of the world's population. Within Western civilisation we can distinguish the '**Anglo-American**' variety which evolved from Protestantism, and the '**European**' from Catholicism.

Orthodox civilisation includes Russia, parts of Belarus and Ukraine, as well as Bulgaria, Greece, Romania and Serbia. It is different from western Christianity because of its Byzantine origin and separate religious traditions. Its characteristics are openness and directness, and a cult of strong rule.

Japanese civilisation evolved from the 2nd to 4th c. AD from a much older Sinic one, estimated to have started in 1500 BC. Religious ideas from **Shintoism** and Buddhism form the basis of Japanese civilisation. Every Japanese person should fulfil duties, and work effectively to benefit the public good.

Jidai Matsuri (Jap. *matsuri* – festivals) in honour of the city of Kyoto. The Japanese take an active part in traditional celebrations. Festivals are the best way to learn about centuries of rich civilisation and the traditions of Japan, its regions and individual cities

Features of Western civilisation

1. Respect for personal dignity and liberty
2. Dominance of individualism
3. Equal rights and civil liberties for all
4. Desire for continuous learning
5. An open attitude toward others

Four main aspects of Shintoism

1. Tradition and family – worship of ancestors and a close relationship with family and clan
2. Love of nature – nature is sacred, so contact helps keep in touch with the gods
3. Physical cleanliness – ritual baths and general care about hygiene
4. Festivals – celebrated in honour of the spirits and gods present in nature



Case study – continuation

cultivation in Jamaica and Haiti and established the first plantations. Later plantations were set up in Central America: Costa Rica, Honduras and Guatemala. In the 19th c. 80% of banana production was provided by UFCo.



to serve banana plantations.

The governments of Central American states, especially Costa Rica, Guatemala, Honduras, Panama and El Salvador, granted foreign companies land for the cultivation of bananas. There were also tax exemptions and other benefits provided in exchange for infrastructure development and loans at favourable rates. Profits grew, and the United Fruit Company (today **Chiquita Brands International**), and Standard Fruit Company (now **Dole**) played an increasingly important role in the region. Today's plantations



Bananas on a plantation

are completely independent of the countries where they are located. They have their own production facilities and services. Sometimes the company growing and trading bananas has an impact on government policy. Therefore, banana-growing countries are known as '**banana republics**' because of the role played by banana companies in the economies and politics of the region. Demand for bananas from Central America grew throughout the entire 20th c., from 15 000 tonnes exported in 1899, to over 4 million tonnes now (35% of global exports).

Bananas arrived in Europe for the first time in 1870, but a significant increase in trade did not take place until the early 20th c. when the first ships with fans and cooling systems were built.

UFCo owned or controlled nearly all the railway lines in Central America. At the beginning, they were built to the order of governments and used to transport coffee, but later they were built by UFCo

In order to obtain crops resistant to sudden changes in weather conditions and pests as well as to improve yields, agriculture has become interested in the achievements of genetics. In 1994 the first **genetically modified (GM)** crop entered the US market: the tomato *FlavrSavr*. In 2010, globally, GM crops occupied 148 million hectares. The largest area of GM crops is found in the United States, followed by Brazil, Argentina, India, Canada and China while in 2010, 29 countries cultivated GM crops. The most frequent include maize, tomatoes, soya beans, potatoes, cotton, melons, tobacco, oilseed rape and sugar beet.

● Livestock rearing

Livestock rearing, especially cattle and sheep, is dependent on environmental conditions. It is found widely in the steppes with their rich natural vegetation. However, in areas of tall hard-leaved grasses, goats and camels are reared instead. The distribution of pigs is determined by human factors as they are reared on farms, based on fodder production and the use of food waste.

Livestock production provides from 50 to 90% of the total agricultural income in MEDCs, while in LEDCs it provides 10 to 40%. Livestock are the basis of **food items** such as meat, fats, milk, eggs, honey, as well as wool, leather, fur, feathers, wax and bones. **Organic fertilisers** are a by-product. In LEDCs, animals are used as a **source of energy** in the field, e.g. to pull ploughs.

Livestock rearing requires sufficient quantities of fodder, so it is developed mainly in countries of temperate climate where there is natural pasture, or where crops are cultivated for animal fodder. Livestock production also requires well-organised transportation and a well-developed food industry (refrigeration, dairy and meat processing).

Cattle provide mainly milk and meat. Dairy breeds are found nearer large cities and more often in MEDCs. Cattle for slaughter are bred in areas of extensive natural pastures such as Brazil and Argentina.

Pigs are bred for meat and fat, and to a lesser extent for skins. Pork accounts for over 40% of world meat production. The greatest intensity is found in the North China Plain. Other major regions include Western and Central Europe, the European part of Russia, the northern part of the United States and eastern Brazil.



Large cattle farm in Nebraska in the United States. A ranch is the name given to such large farms (from Spanish *ranch*o)

Examples of clusters and their speciality

No.	Cluster name	Country	Speciality
1	Silicon Valley	United States	semiconductors, IT technologies
2	Nokia	Finland	telecommunication
3	Gesundheits Cluster	Austria	health
4	Lebensmittel Cluster	Austria	food industry
5	Technical Textiles in Rhone Alpes	France	textiles
6	Eco Energies Clusterrhonealpes	France	renewable energy
7	Mobel and Holzbau	Austria	wood industry
8	Lyon Games	France	computer games

Examples of clusters in Poland and their speciality

No.	Cluster name	City	Speciality
1	Clean Coal Technologies	Katowice	energy
2	ICT Pomerania	Gdynia	IT
3	Aviation Valley	Rzeszów	aeroplane production and pilot training
4	Plastics Valley	Tarnów	plastics

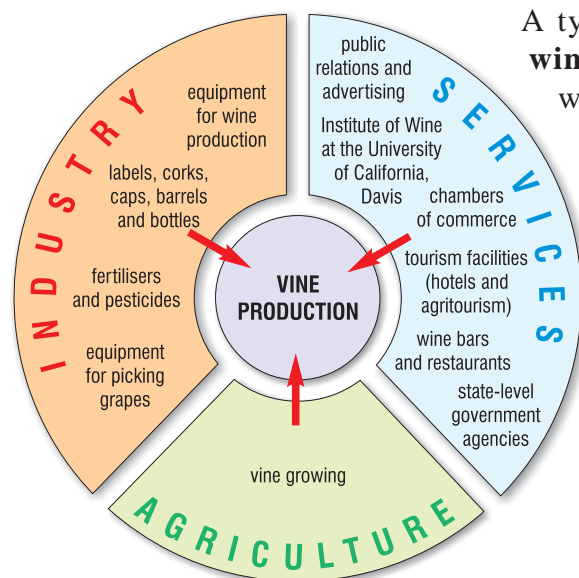


Fig. 73. California wine cluster

A typical example is the **California wine cluster**, including viticulture, wine production support facilities (such as barrels, bottles, bottle caps, corks and labels) as well as specialist publications and service companies, dealing with **public relations*** and advertising. For the benefit of vine growers, other companies produce fertilisers and pesticides, harvesting and irrigation equipment. The cluster has a strong network of relationships with the California food processing industries and catering, and is also a tourism destination.

Clusters are a way of increasing competitiveness through cooperation of neighbouring businesses. The logistics of transportation, communication and information are more effective and less expensive when they are located near to one another. By working together

* *Public relations* (PR) – how an institution maintains good relations with its public.

the flow of information which supports exchange of technological processes, innovation, creation of new businesses and new jobs, is made easier. Therefore, **the number of clusters is increasing.**

Case study

Silicon Valley in California is a technopole, but also the world's most famous cluster. In an area of about 500 km² between Palo Alto and San Jose there are approximately 6000 companies working in high technology which employ over one million people, mainly in the field of microelectronics and computers. Every year many people get a job in Silicon Valley, but many change jobs too. The mobility of the labour force encourages sharing of experience and innovation.

The American journalist **Don Hoefler** invented the name in 1971. He used it to describe a cluster of electronics companies located near **Santa Clara** which use silicon crystals in their production.

The **social and economic success** of Silicon Valley is a result of the interdependence of many factors. The first is geographical location and climate. The area between Palo Alto and San Francisco has a warm Mediterranean climate. San Francisco, with 700 000 inhabitants, is surrounded on three sides by water, so access to a beach is easy. It takes only two hours to get to the mountains by car. Such environmental variety creates favourable conditions for rest and relaxation after tiring intellectual work.

An **important success factor** has been the large number of higher education institutions, many recognised as some of the best in the United States, such as the University of California at Berkeley and Stanford University, but also San Jose State University (SJSU), the University of San Francisco and the Catholic Santa Clara University (SCU). Every year, many talented and creative students graduate from these institutions, and often take their first professional steps in Silicon Valley. All institutions undertake intensive research which results in many patents registered.

Silicon Valley has a well developed transport infrastructure. Commuting time is never more than one hour. Currently alternative means of transport, often public and including train and bike, are becoming increasingly important.



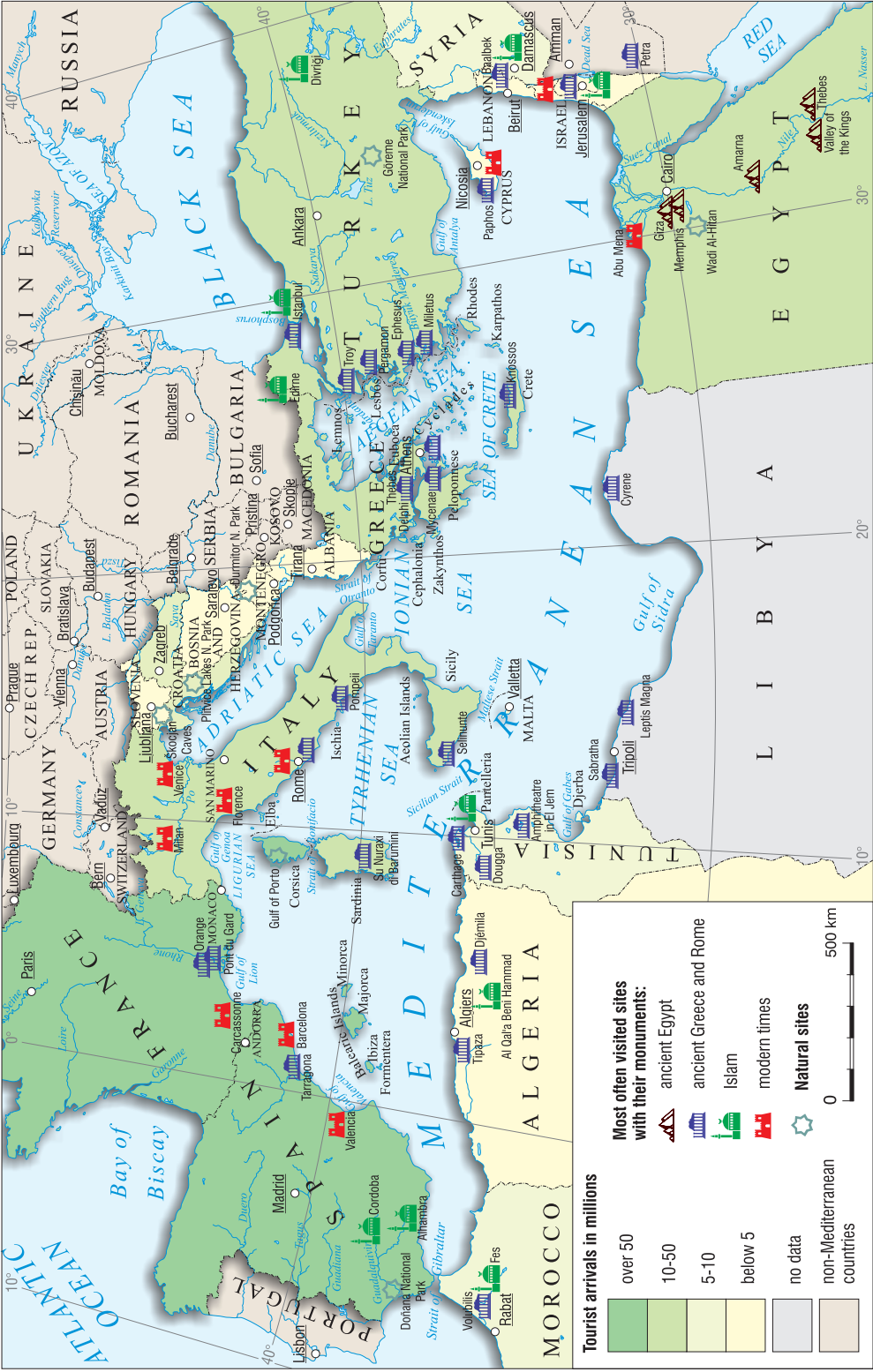


Fig. 82. The Mediterranean Basin with major tourism attractions

Countries of **northern Africa** make use of the warm Mediterranean climate and long beaches to develop leisure tourism. The Atlas Mountains provide mountain tourism. In the African part of the Mediterranean tourism region, there are many **ancient monuments**. Egypt attracts tourists with its pyramids, the temple at Karnak, the Valley of the Kings and many other sites. In Carthage, there are monuments from the Roman period, while in Fez and Tunis – Moorish monuments. An extensive tourism infrastructure and marketing have brought an inflow of tourists; in recent times, however, it has been dependent on the political situation.

Alpine tourism region

The **Alps** are one of the most visited world tourism regions; annually they attract about 120 million tourists. Mountain villages offer extensive and varied accommodation. **Active tourism** dominates here. Well-prepared ski runs, as well as an expanded infrastructure of ski lifts and cable cars are a great advantage. Ski runs have different degrees of difficulty, and many have artificial lighting.

There is a dense network of roads in the Alpine region, while numerous road and rail tunnels allow free movement of tourists.



Important factors favouring skiing in the Alps are opportunities for recreation and fun. Charming cafes are located in buildings of interesting architecture. Many cultural activities are available in these winter resorts

It's interesting!

Mont Blanc – highest mountain in the Alps (4807 m) was climbed for the first time on 8 August 1786, by **Jacques Balmat**, a chamois hunter and searcher for crystals, and **Michel Gabriel Paccard**, a student at the University of Turin.

A year later **Horace de Saussure**, the Geneva scientist, climbed to its summit and established its height.

On 4 August 1818 **Antoni Malczewski**, the Polish Romantic poet, climbed to the top. This event is considered the beginning of Polish mountaineering.

Today Mont Blanc is visited by about 20 000 tourists per year.



4. CONSEQUENCES OF THE EXPLOITATION OF SOILS

Soil is the surface layer of the lithosphere which is used in agriculture. It is developed after long soil-forming processes which involve gradual transformation of weathered rock and decomposed organic matter into soil under influence of soil-forming factors.

Soil provides plants with nutrients and water and is a resource which is partly (but with difficulty) renewable. A layer of soil with a thickness of 2-3 cm can take between 200-1000 years to form.

Different environmental conditions result in the formation of different types of soil.

Soils with a high suitability for agriculture include **chernozems**, **alluvial soils**, **rendzinas**, **volcanic soils** and **brown earths**. These soils occur most frequently in areas of warm temperate and sub-tropical climates.

Poor soils, which are not used for agricultural activities, include **skeletal soils**, **tundra soils** and **peaty waterlogged soils**.

● Soil degradation and destruction

Soil degradation is the process by which soil properties (chemical, physical and biological) deteriorate. Soil can lose its usefulness for agriculture (partly or totally) due to the impact of both **natural factors** and **human activities**.

Natural factors which degrade soils include water erosion (washing away organic material) and wind erosion (blowing away the surface layer). Soil can also be destroyed by fire, prolonged drought or landslides.

However, soil degradation is mostly a result of human activity:

- **deforestation** (particularly of rainforests): soils of deforested areas are deprived of protection against intense precipitation, and the amount of organic matter to form humus is limited
- **excessive addition of chemicals**: fertilisers contain large amounts of calcium, potassium and nitrogen and applied to the soil, they change its chemical properties. Intensive fertilisation with chemicals occurs in European countries such as Netherlands, Denmark and Germany.
- **excessive animal grazing**: grass is eaten and trampled by animals. This leads to soil losing its protective layer of vegetation and processes such as desertification take place (e.g. large areas in the Sahel in Africa).
- **emission of dust and fumes** by industry, transport and from local services: this can be a cause of soil contamination with heavy metals such as nickel, mercury, cadmium, arsenic and lead. Soil properties then significantly deteriorate. A significant increase in this type of pollution has occurred near large cities such as Paris, London, New York and Beijing.

The most degraded soils are found in areas of intensive long-term agricultural use, e.g. in the Sahel zone in Africa (excessive animal grazing) and the North

China Plain (intense, primitive agriculture connected with high population density).

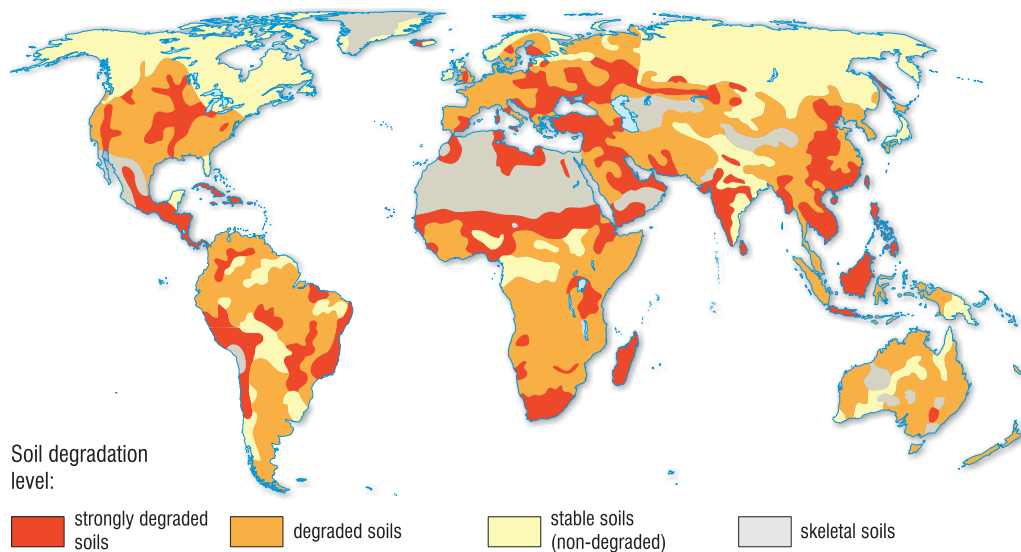


Fig. 106. World soil degradation

Source: FAO Statistics Division 2010, United Nations Environment Programme (UNEP), GRID-Arendal

Degraded soils are characterised by:

- destruction of soil structure
- reduction in the quantity and quality of humus
- acidification due to the leaching out of calcium, magnesium and potassium ions.

Soil degradation reduces soil fertility, therefore reducing yields.

The **United Nations Convention to Combat Desertification** came into force in 1996 in countries in danger of drought and desertification, mainly in Africa. It highlights the link between environmental degradation and hunger, poverty, migration and conflict. The convention was signed by more than 190 countries.

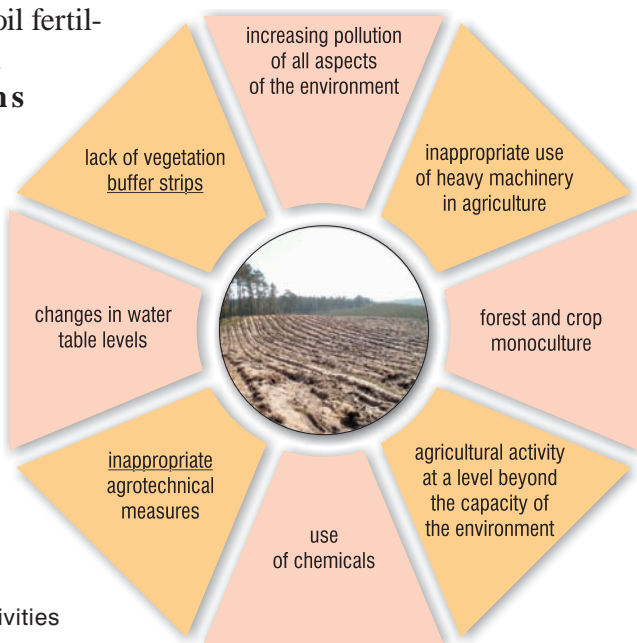


Fig. 107. Examples of human activities leading to soil degradation