TOBACCO | FORESTS

How tobacco control contributes to achieving Sustainable Development Goal 15

BACKGROUND

In September 2015, the UN General Assembly formally adopted the Sustainable Development Goals (SDGs). The goals call for all countries to eliminate poverty and hunger worldwide, protect the climate, forests and oceans and improve public health.

Goal three (health) includes the implementation of the WHO Framework Convention on Tobacco Control (FCTC). With good reason, considering the fact that seven million people die each year as a result of consuming addictive tobacco products.[1] This is the leading preventable cause of death through non-communicable diseases (NCDs).

Tobacco control is also relevant for the achievement of other development goals. For example, the reduction of tobacco consumption and production contributes to the conservation of the oceans, seas and marine life (SDG 14)[2] as well as to the conservation of forests (SDG 15).

LIFE ON LAND

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

CIGARETTE BUTTS IN FORESTS

Every year, one billion smokers consume 5.7 trillion cigarettes worldwide.[3] After smoking, cigarette butts most commonly are littered, adding up to an estimated 4.5 trillion pieces worldwide polluting the environment every year.[4] Most of them incur in densely populated areas, nevertheless, they also have negative impacts in the countryside and in forests. Cigarette butts are composed of a filter and residue tobacco. Cigarette filters are made of cellulose acetate, i.e. bioplastic microfibers. They are not biodegradable, but decompose into microplastic which in turn can enter the food chain in forests (SDG 15.5).

Additionally, they contain up to 7,000 toxic substances, among others bioaccumulative heavy metals and nicotine.[5] These poisons leach out to the environment and are washed into soils and the groundwater (SDGs 6.3, 6.6, 15.1). One single cigarette butt can contaminate organisms in about one squaremeter e.g. with nicotine.[6]

The poisonous effects of tobacco product waste on forest animals and plants is largely invisible. However, littering lighted or smouldering cigarette butts in the woods leads to visible and dangerous consequences. Particularly in dry seasons, they ignite forest fires (SDGs 15.1, 15.2): In summer 2009, a cigarette butt caused a fire on 2,000 hectares of forest in the Russian Republic of Buryatia.[7] In spring 2014, again due to a cigarette, 70 hectares of Alpine forest burned down in Austria.[8] In Saint-Cannat, France, 800 hectares of forest catched fire in summer 2017[9] and, in summer 2018, 600 hectares of forest were destroyed in Oregon, USA.[10] There are no exact numbers how many forest fires worldwide are caused by cigarette butts. Reasons for this are that it is relatively difficult to determine the exact cause of ignition[11] and cigarette butts are rarely registered as a separate cause of fire in statistical data. Besides, in many cases the causes of fires cannot be clarified unambiguously.[12]

TOBACCO CONTROL IS PART OF THE DEVELOPMENT GOALS

With **SDG 3**, the United Nations want to "ensure healthy lives and promote well-being for all at all ages". This includes target 3.a, which aims to strengthen the implementation of the WHO Framework Convention on Tobacco Control (FCTC).

DEFORESTATION FOR CIGARETTES

Globally, 32.4 million tonnes of green tobacco are produced on 4 million hectares of arable land every year. After curing, they amount to 5.6 million tonnes of dry tobacco.[13] Tobacco takes up more nitrogen, phosphorus and potassium than other crops. In consequence, the soil is rapidly depleted. To meet the demand for fertile soils, farmers in tobacco growing countries such as Tanzania are cutting down forests to develop new fields.[14]
Nevertheless, the deforestation related to tobacco curing is more serious. The green tobacco leaves of the Virginia variety – a major component in the widely known American Blend cigarettes – are dried in a barn with heated air (fluecured). Every year, this process uses globally 8 million tonnes of fuelwood which is mostly obtained from surrounding forests (SDGs 6.6, 12.2, 15.2).[15]
The consequences are particularly severe for the miombo woodlands, a 270 million hectares dry forest belt in southern Africa. In tobacco growing areas in Tanzania, tobacco accounts for 3.3 to 6.5% of deforestation.[16] Estimates for Zimbabwe are 14% and for Malawi even 26%.[17]
The fact that the forest does not regenerate and its biodiversity decreases (SDG 15.5) shows the massive damage caused to the miombo woodlands. Thus, the local population is losing a functioning ecosystem providing medicinal plants, edible forest products, food for livestock as well as wood for construction and fuel.[18] Moreover, climate consequences such as increasing temperatures and erratic weather conditions are effects on local level that could even result in desertification (SDG 15.3).[19]
Similar experiences are reported from Asia and South America. For example in Kushtia district, Bangladesh, the tobacco barns are fueled with rice straw because there is no more fuelwood available from the forests.[20]
The global climate is also affected by the loss of forests in their function as CO_2 storage and increasing CO_2 emissions from burning wood (SDG 13).
Moreover, the manufacturing of globally 6 trillion cigarettes per year uses 2.4 million tonnes of paper and carton for cigarette papers and packaging.[21]

WHAT NEEDS TO BE DONE

In the long term, the reduction of tobacco use (SDG 3.a; FCTC Art. 3) contributes to achieving SDG 15.
To reduce poisoning of soils due to cigarette butts as well as forest fires it is vital to raise awareness among users about the effects of littering butts (SDG 12, FCTC Art. 12), as well as to enforce smoking bans in forests, like they are in place e.g. in Germany.
In tobacco growing countries, forest protection is urgently needed (SDG 15). Firstly, the amount of fuel wood required to cure tobacco has to be reduced using improved curing barns. Model barns presented by the tobacco industry are far too expensive for farmers e.g. in Tanzania and serve mainly as CSR action.[22] Therefore, governments should support the switch to effective barns as well as sustainable agroforestry schemes, e.g. within development cooperations (SDGs 12.2, 15.b, 17.7; FCTC Art. 18).
Additionally, there is a dire need for afforestation programmes to restore the forest with native tree species and to improve its biodiversity (SDGs 15.2, 15.3, 15.8; FCTC Art. 18). It is important to commit the tobacco industry to finance these programmes (SDG 15.a), but not to entrust it with their implementation (FCTC Art. 5.3).[23] Experiences from Tanzania show that tree planting schemes by tobacco companies do not effectively counter deforestation.[24]
In the long run, governments should promote sustainable alternative livelihoods for tobacco farmers (SDGs 15.1, 15.2, 17.4; FCTC Art. 17). Bangladesh, for example, envisages to exit tobacco cultivation by 2040 and uses tobacco tax revenues to further this purpose. Development partners and international organisations should strongly support this move (SDG 15.b, 17.1, 17.2).[25]

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Further information on tobacco & the SDGs:→www.unfairtobacco.org/en/sdgs

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