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).

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 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 square meter e.g. with nicotine.6

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

TOBACCO DESTRIPES WOODS
Deforestation in the miombo woodlands for tobacco
- Tanzania 3.3-6.5% of deforestation
- Zimbabwe 14% of deforestation
- Malawi 26% of deforestation

The manufacturing of 6 trillion cigarettes every year uses 2.4 million tonnes of cigarette paper and cartons for packaging.

Forest fires caused by cigarette butts
- Russia 2009 2,000 hectares
- Austria 2014 70 hectares
- France 2017 800 hectares
- USA 2018 600 hectares
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. In spring 2014, again due to a cigarette, 70 hectares of Alpine forest burned down in Austria. In Saint-Cannat, France, 800 hectares of forest caught fire in summer 2017 and, in summer 2018, 600 hectares of forest were destroyed in Oregon, USA. 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 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.

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. 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. 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 (flue-cured). 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). 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. Estimates for Zambia are 14% and for Malawi even 26%.

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. Therefore, governments should support the switch to effective barns as well as sustainable agroforestry schemes, e.g. within development cooperations (SDGs 12.2, 15.6, 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). Experiences from Tanzania show that tree planting schemes by tobacco companies do not effectively counter deforestation.

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).

Sources

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Further information on tobacco & the SDGs:—www.unfairtobacco.org/en/sdgs
We expose how tobacco industry harms farmers, consumers and the environment.

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