

**Tobacco – Environmental Risk and Economic Damage  
New Publications of the German Cancer Research Center**

Not only tobacco consumption causes severe diseases; tobacco cultivation, too, is associated with risks relating to health, social structures and, in particular, the environment. Valuable forests, particularly in tropical areas, are destroyed to create new land for cultivation and gain firewood for drying tobacco leaves. Soils and waters are contaminated due to massive use of pesticides, chemical fertilizers and growth regulators to inhibit side shoots. Compared to other plants, tobacco needs several times more nitrogen, potassium and phosphorus, and it considerably accelerates soil erosion. Workers on tobacco plants are affected by Green Tobacco Sickness, which is caused by skin contact with the nicotine-containing tobacco leaves; symptoms include nausea, vomiting, dizziness, headaches, difficulty breathing and acute cardiovascular conditions. Child labor is tolerated on tobacco plantations. Hunger and poverty are the result when vital agricultural crops are substituted with tobacco cultivation. "Tobacco cultivation leaves a trail of environmental destruction and social squalor," says Dr. Martina Pötschke-Langer, head of the Division of Cancer Prevention at the German Cancer Research Center (Deutsches Krebsforschungszentrum, DKFZ) and the WHO Collaborating Center for Tobacco Control.

Another aspect is the enormous amount of tobacco waste, mainly cigarette stubs, in which a multitude of toxic and carcinogenic substances is accumulated. These substances are washed into the soil and carried into groundwater, rivers and seas, thus contributing to the creeping pollution of the environment. Since the toxic tobacco plant is cultivated and consumed across the globe, the environmental risk of tobacco is a global problem.

"Umweltrisiko Tabak – von der Pflanze zur Kippe" (Tobacco as an environmental risk – from the plant to the stub") – this is the title of the newly published first German report on this topic. The report also discusses possibilities for eliminating the environmental risk caused by tobacco. Instead of tolerating or even supporting tobacco cultivation, there should be incentives for cultivating alternative agricultural products. Cigarette stubs should no longer be carelessly thrown away on streets, in public places and, above all, on children's playgrounds. Cigarette stubs are toxic waste that should be disposed of as hazardous waste.

Tobacco is probably unequalled by any other mass product when it comes to risks and hazards in its production, consumption and disposal. Profits in the billions are gained with tobacco. However, the resulting healthcare and environmental costs are not paid by those causing the costs, namely the tobacco industry, but are imposed on society. Another publication explores the economic costs of smoking. In their re-evaluation, economists Professor Michael Adams and Dr. Tobias Effertz of the Institute of Commercial Law of Hamburg University come to the conclusion that the direct and indirect costs of tobacco consumption in Germany amount to approximately 34 billion euros each year. This, however, tends to be a lower limit, since the restrictions in quality of life and the suffering of those affected and their families as well as lost years of life have not been taken into account in this calculation.

The two pamphlets published by the German Cancer Research Center, "Umweltrisiko Tabak – von der Pflanze zur Kippe" (Tobacco as an environmental risk – from the plant to the stub") (in German) and "Die Kosten des Rauchens für Gesundheitswesen und Volkswirtschaft in Deutschland" (The costs of smoking for healthcare and economy in Germany) (in German) will be presented on December 8<sup>th</sup>, 2009 in the framework of the 7<sup>th</sup> German Tobacco Control Conference. The conference program is available at:

[http://www.tabakkontrolle.de/pdf/Programm\\_Tabakkontrolle\\_2009.pdf](http://www.tabakkontrolle.de/pdf/Programm_Tabakkontrolle_2009.pdf)

The publications are available for download at [www.tabakkontrolle.de](http://www.tabakkontrolle.de) or can be obtained in print from the Press Office of the German Cancer Research Center.

The German Cancer Research Center (Deutsches Krebsforschungszentrum, DKFZ) is the largest biomedical research institute in Germany and is a member of the Helmholtz Association of National Research Centers. More than 2,000 staff members, including 850 scientists, are investigating the mechanisms of cancer and are working to identify cancer risk factors. They provide the foundations for developing novel approaches in the prevention, diagnosis, and treatment of cancer. In addition, the staff of the Cancer Information Service (KID) offers information about the widespread disease of cancer for patients, their families, and the general public. The Center is funded by the German Federal Ministry of Education and Research (90%) and the State of Baden-Württemberg (10%).

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