

POLICY OPTIONS AND RECOMMENDATIONS ON ECONOMICALLY SUSTAINABLE ALTERNATIVES TO TOBACCO GROWING (IN RELATION TO ARTICLES 17 AND 18 OF THE WHO FCTC)

1. INTRODUCTION

The WHO Framework Convention on Tobacco Control (WHO FCTC) enshrines a comprehensive range of multisectoral evidence-based measures that aim to reduce tobacco use and exposure to tobacco smoke. At the same time, it also recognizes the need to promote economically viable alternatives to tobacco production as a way to prevent possible adverse social and economic impacts on populations whose livelihoods depend on tobacco production. Moreover, Parties agreed to have due regard to the protection of the environment and the health of persons in respect of tobacco cultivation and manufacture.

1.1 The global tobacco production chain¹

The global tobacco industry is a highly specialized oligopoly that depends on the cultivation of the tobacco crop (*Nicotiana tabacum* and to a much lesser extent *Nicotiana rustica*).

- The agricultural sector is composed of **tobacco growers and workers** who produced (in 2011) about 7 461 994 tonnes of raw tobacco on a total of 4 211 885 hectares² in about 120 countries.³ The challenges of the agricultural sector related to contracting, extension, support and marketing/payment systems vary by region.
- The **primary processing** of the tobacco leaves is undertaken by specialized companies, called "first processors" or "leaf companies". Worldwide, only a few companies work in this sector.⁴ The business model is a vertical integration of the tobacco growers and workers. The companies usually provide all the necessary inputs as well as loans for cropping.
- The **tobacco products industry** comprises facilities that manufacture cigarettes, cigars, smokeless tobacco (chewing, plug/twist, and snuff tobacco), loose smoking tobacco (pipe and roll-your-own cigarette tobacco), reconstituted (sheet) tobacco, and other tobacco products such as bidis, and that market them under different brands.

The farmers themselves earn very little for their crop in comparison with the final price obtained at the end of the value-added chain.⁵ It is estimated that one ton of raw tobacco produced by a farmer and sold to the "first processor" increases in value 47.2 times⁶ along the production chain until the point at which smokers buy cigarettes.

1.1.1 Global tobacco product consumption trends

¹ The figures in this section will be updated/revised periodically, based on availability of data.

² Food and Agriculture Organization of the United Nations. FAOSTAT (<http://faostat.fao.org/site/567/default.aspx#ancor>).

³ Geist HJ, Chang K, Etges V, Abdallah JM. Tobacco growers at the crossroads: Towards a comparison of diversification and ecosystem impacts. *Land Use Policy*. 2009;26:1066-79.

⁴ Van Liemt G. The world tobacco industry: trends and prospects. Geneva: International Labour Office; 2002 (Sectoral Activities Programme working paper No. 179).

⁵ The top 5 largest international tobacco companies. (<http://www.top5ofanything.com/index.php?h=fb59add3>).

⁶ Quotient of value of total volume of the tobacco market divided by estimated value of raw tobacco at farm gate.

Globally, the tobacco epidemic has expanded to, and become more focused on, the world's low- and middle-income countries, due largely to the expansion of the multinational tobacco industry's marketing efforts in eastern Europe, Asia, Africa, and Latin America.^{7,8}

Ten years ago, it was predicted that any reduction in the number of smokers and in total tobacco consumption over the next 20 years would gradually. Half of this time has passed and there has been clear progress in WHO FCTC implementation and signs of reduction in tobacco demand.

In this context, the current scenario for global tobacco control needs to be better understood, taking into account its potential impact on the livelihoods of tobacco growers and the economics of tobacco-growing regions.

These new trends increase the urgency of considering measures to implement Article 17 by the Parties in tobacco-growing regions, especially in those Parties where tobacco represents a significant source of income to the national economy.^{9,10}

1.1.2 Labour demand in the tobacco production chain

The tobacco production chain demands labour in three different sectors, agriculture, manufacturing and services sector including sales and distribution. The agricultural sector is composed of tobacco growers and contractual, non-contractual, permanent or seasonal workers employed by the farmers.

Tobacco requires a lot of manual working units per hectare compared to many other crops, even on mechanized farms. A 2003 ILO report estimated that in 2003, 100 million people worked in the tobacco industry, of whom only about 1.2 million were employed in manufacturing, 40 million worked in crop and leaf processing, and 20 million worked in home industries (such as hand-rolling bidis or kretek cigarettes in India and Indonesia, respectively). The remaining 38.8 million people worked in tobacco-related processes and industries including distribution, sales and promotion of tobacco use.¹¹ It is important, therefore, to recognize all of these people as tobacco workers (at least part-time) in so far as applicability of the policy options and recommendations are concerned.

1.2 Alternative crops and livelihoods

Many countries, including the world's largest producers, are taking steps to find alternatives to tobacco growing. Several economically sustainable alternatives to tobacco growing have been identified in studies in various regions of the world.¹² In order to find economically sustainable alternatives to tobacco growing, not only income and crop profitability but all aspects of farmers' livelihoods need to be addressed. A framework for alternative livelihoods that addresses the problem holistically could form a bridge between academic findings and policy decisions.

1.3 Occupational risks for tobacco workers and growers

Several occupational risks related to tobacco growing are well known, including green tobacco sickness and as in many other agricultural sectors, pesticide intoxication, respiratory and dermatological disorders

⁷ Shafey O et al. The tobacco atlas, 3rd ed. Atlanta (GA): American Cancer Society and World Lung Foundation; 2009.

⁸ WHO report on the global tobacco epidemic, 2008. Geneva: World Health Organization; 2008.

⁹ Reuters, 29 April 2014 (<http://uk.reuters.com/article/2014/04/29/brit-am-tobacco-germany-idUKL2N0NE19820140429>).

¹⁰ Bloomberg, 25 April 2014 (<http://www.bloomberg.com/news/2014-04-24/japan-tobacco-forecasts-17-profit-drop-on-restructuring-costs.html>).

¹¹ International Labour Organization Newsroom, 18 September 2003 (http://www.ilo.org/global/about-the-ilo/newsroom/features/WCMS_071230/lang-en/index.htm).

¹² Summary of possible alternative crops. Paper presented at the third meeting of the working group (in relation to Articles 17 and 18 of the WHO FCTC), Geneva, Switzerland, 14-16 February 2012.

and cancers. Green tobacco sickness,¹³ the disease most specifically related to tobacco growing, results from dermal absorption of nicotine, which is exacerbated during the handling of wet leaves, but which may be preventable by the use of appropriate individual protective equipment.¹⁴ Furthermore, in the production of bidis, exposure to and inhalation of tobacco dust during manufacturing lead to respiratory problems. This is particularly so for women and children. In addition, bidi rolling requires the rollers to sit for long hours in a particular posture, which leads to musculoskeletal problems.

1.4 Impact on employment and social disruption

In some countries, two issues in particular exacerbate the social disruption and poverty caused by tobacco farming: bonded labour and child labour.¹⁵ An overview of the social disruption caused by tobacco growing was given at the second meeting of the study group on economically sustainable alternatives to tobacco growing in Mexico City in 2008.¹⁶

The social disruption caused by tobacco growing must be addressed from a development perspective, taking into consideration poverty, unfair contracts, and child and bonded labour. Child labour and bonded labour must be tackled from a human rights perspective – these practices violate rights established in international law – in collaboration with relevant international organizations such as ILO, UNICEF and UNDP.

1.5 Environmental impact¹⁷

Forest degradation, deforestation to obtain the wood needed for the curing process, and deforestation as cultivators clear land (sometimes compensating for lost nutrient levels on existing cultivated land), leads to some of the major types of vegetation change associated with biodiversity losses that result from tobacco cultivation in many developing countries.¹⁸

Although the global share of agricultural land used for tobacco growing is less than 1%, its impact on global deforestation is higher.¹⁹ In some countries, research suggests that tobacco growing may be up to 10 times more aggressive than the sum of all other factors in regard to deforestation. The cost of mitigating the socio-ecological losses is borne almost exclusively by farmers. Tobacco, being a mono-crop, depletes soil nutrients.²⁰ It is a high input-oriented crop and the per-acre requirement of pesticides and fertilizers is very high under certain conditions.²¹ Tobacco ranks among the 10 crops with the highest fertilization rates.²²

¹³ Pereira Vasconcelos de Oliveira P, et al. First reported outbreak of green tobacco sickness in Brazil. *Cadernos de Saúde Pública*. 2010;26:2263-69.

¹⁴ In Brazil research undertaken by the Federal University of Pelotas has shown that the personal protective equipment recommended by the Brazilian Tobacco Growers Association was not efficient in protecting workers from green tobacco sickness.

¹⁵ International Labour Organization conventions on child labour.

¹⁶ Otañez M. Social disruption caused by tobacco growing. Study conducted for the second meeting of the study group on economically sustainable alternatives to tobacco growing, Mexico City, 17-19 June 2008.

¹⁷ This section is based on the corresponding section of document FCTC/COP/3/11 (page 4, paragraph 17).

¹⁸ Yanda PZ. Impact of small scale tobacco growing on the spatial and temporal distribution of Miombo woodlands in Western Tanzania. *Journal of Ecology and the Natural Environment*. 2010;2:10-16.

¹⁹ Geist H. Global assessment of deforestation related to tobacco farming. *Tobacco Control*. 1999;8:18-28.

²⁰ Goodland JA, Watson C, Ledec G. *Environmental management in tropical agriculture*. Boulder (CO): Westview Press; 1984.

²¹ *Fertilizer use by crop*. Rome: Rome, Food and Agriculture Organization of the United Nations; 1999.

²² *Fertilizer use by crop*. Rome, Food and Agriculture Organization of the United Nations; 2006.

1.6 Corporate practices undermining the implementation of sustainable alternatives to tobacco growing

The tobacco industry suggests that effective implementation of sustainable alternatives to tobacco growing as well as measures under the WHO FCTC for reducing demand would suddenly extinguish the economic benefits that tobacco growing brings. The economic contribution of tobacco growing to local and national economies, employment figures and the national balance of trade is usually mentioned by the tobacco industry.²³ In reality, annual consumption usually decreases by fractions of percentage points, thus allowing time for growers to diversify into other activities gradually and in combination with implementation of government adjustment programmes. Mechanization of tobacco growing and competition in international trade generally bear much more responsibility for decreasing employment.²⁴ Therefore, the suggestion by the tobacco industry is incorrect. Moreover, Parties shall act to protect the implementation of Articles 17 and 18 of the WHO FCTC against the commercial and vested interests (interference) by the tobacco industry in accordance with Article 5.3 of the Convention and the guidelines for its implementation.

2. PURPOSE, SCOPE AND APPLICABILITY

2.1 The purpose of these recommendations is to provide Parties with a general working framework within which they may adopt the comprehensive policies and effective measures required to fulfil their obligations under Articles 17 and 18 of the WHO FCTC.

2.2 The recommendations aim to guide Parties in implementing policies that promote the establishment of innovative mechanisms for the development of sustainable alternative livelihoods for tobacco growers and workers in relation to Articles 17 and 18 of the WHO FCTC.

2.3 Parties are recommended to build up development programmes connected with the promotion of food security and feasible markets that cover all aspects of the alternatives to tobacco growing, including economic viability and environmental protection. Government agencies, particularly those with a strong influence in rural areas, have an important role to play in supporting the diversification of livelihoods in tobacco-growing regions, through an array of policies and measures, including the provision of training for tobacco workers and growers and their families. International institutions and farmer organizations should also play an important role in the development and implementation of policy (see Principle 2 in *Guiding principles*).

2.4 Policies and programmes for promoting or shifting to alternative livelihoods may be planned in a time-bound and phased manner. Simultaneously, reconversion programmes for growers and workers should be developed and information in this regard shared with relevant stakeholders. The costs of adjusting supply as demand diminishes will be stretched out over decades. Thus, the transition costs will also be spread over a long period. Countries should orient educational programmes, and information campaigns backed by data and evidence in order to prevent any attempt to misinform farmers about the sustainable alternative livelihoods available to tobacco growers and workers. Tobacco-growing countries should fix realistic goals and targets depending on their prevailing condition and capacity to implement strategies to provide alternative livelihoods for growers and workers.

2.5 While the measures recommended here should be applied by Parties as broadly as necessary, Parties are strongly encouraged to implement measures beyond those recommended when adapting them to their specific circumstances, in order to achieve the objectives of Articles 17 and 18 of the WHO FCTC, provided they do not harm the livelihoods of the tobacco growers and workers who find themselves with the need to shift to alternative activities/crops. The WHO FCTC does not aim to penalize tobacco growers and workers, but aims to promote economically viable alternatives for tobacco workers, growers and, as the case may be, individual sellers who will be affected by a reduction of tobacco consumption.

²³ Assunta M. Tobacco industry's ITGA fights FCTC implementation in the Uruguay negotiations. Tobacco Control, 26 May 2012. doi:10.1136/tobaccocontrol-2011-050222.

²⁴ Tobacco industry interference with tobacco control. Geneva: World Health Organization; 2008.

3. GUIDING PRINCIPLES

Principle 1: Livelihoods diversification should be the concept guiding implementation of economically sustainable alternatives to tobacco growing.

The concept of livelihood diversification is based on the fact that the more diversified a productive unit is, the more likely it is that farmers will have wider choices to diversify their economic and productive activities. The diversification of livelihoods approach does not merely mean growing other crops in the intervals between tobacco growing or associated with tobacco growing (intercropping). It goes beyond the idea of substituting one crop with another. It is a greater set of opportunities and alternatives that are fundamental to establishing successful strategies to livelihood diversification specially combat the various forms of vulnerability to which tobacco growing families are exposed to, particularly in poor rural areas. These alternatives should provide opportunities that would permit tobacco farmers to enhance their health and socioeconomic wellbeing. It is therefore important that diversification of livelihoods go beyond the farm level and be integrated into the broader development strategy to facilitate successful and sustainable implementation.

This means that policies for implementing Articles 17 and 18 should be holistic and encompass not just the economic and productive dimensions, but also aspects that can influence the welfare and quality of life of workers, as well as environmental protection. The livelihoods approach accordingly identifies five types of capital – natural (land or livestock), human (labour/education), physical (infrastructure), financial (savings, income) and social (network of social relations/social structure) – that households depend upon in the context of livelihood strategies.

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Principle 2: Tobacco growers and workers should be engaged in policy development concerning Article 17&18 in line with Article 5.3 of the WHO FCTC and its guidelines

Tobacco growers and workers should be engaged in the process of policy development concerning Article 17 and 18 and involved in implementation, in accordance with national laws, through a bottom up and territorial approach, making sure that their involvement is insulated from the commercial and vested interests of the tobacco industry.

In order to take full advantage of the existing resources, public policies and intersectoral approaches are required. To better address these and other aspects, the involvement of farmers in decision-making processes concerning Articles 17 and 18 should be encouraged by providing adequate channels for them to voice their needs and concerns.

Principle 3: Policies and programmes to promote economically sustainable alternative livelihoods should be based on best practices and linked to sustainable development programmes

A successful shift from tobacco growing to alternative economic activities requires profitability, the provision of technical assistance, research, capacity building, the promotion of community organization, and market and social support, with special emphasis on the transition period. Where appropriate, financial mechanisms should be developed.

The alternatives should be developed under the principles of promoting sustainable development and poverty eradication, enhancing the ability of growers to manage natural resources sustainably with lower negative environmental impacts, increasing resource efficiency and reducing waste.

Policies to promote economically sustainable alternative livelihoods should be comprehensive, multisectoral, and consistent with the objective of the WHO FCTC, which means taking into account not just the short-term economic viability of the tobacco leaf business, but also the many hidden and external costs of tobacco growing and processing. Governments should consider to avoid measures that encourage new entries into tobacco growing or that discourage existing growers from seeking alternatives. Where appropriate, funding mechanisms should include special institutional arrangements for promoting alternative crops, education, communication and/or training. Efforts should also be made to integrate such policies into existing government schemes or programmes to promote sustainable development.

Principle 4: The promotion of economically sustainable alternative livelihoods should be carried out within a holistic framework that encompasses all aspects of the livelihoods of tobacco growers and workers (including the health, economic, social, environmental and food security aspects)

Diversification activities need to be incorporated into the policies of agrarian development, through appropriate public policies that guarantee quality of life to growers and the agrarian population as a whole. Such policies should aim at taking full advantage of the existing regional and local resources.

Every tobacco grower has the right to be duly informed about the risks that tobacco growing poses to his or her health and to the environment and about how to prevent them (see also section 4.2). National programmes and policies to protect workers' health and the environment should also address the risks related to tobacco production.

Adequate human, material and financial resources are required to establish and sustain the promotion of alternative livelihoods at local, municipal, national/federal, regional and international levels.

Principle 5: Policies promoting economically sustainable alternative livelihoods should be protected from commercial and other vested interests of the tobacco industry, including leaf companies, in accordance with Article 5.3 of the WHO FCTC and its guidelines.

There is a fundamental and irreconcilable conflict between the interests of the tobacco industry and public health. The tobacco industry produces and promotes a product that has been proven scientifically to be addictive, to cause disease and death, and to give rise to a variety of social ills, including increased poverty. Therefore, Parties should protect the formulation, implementation and funding mechanisms to implement Articles 17 and 18 of the WHO FCTC from the tobacco industry to the greatest extent possible. The tobacco industry should be liable to the extent proven for the health and environmental harms related to tobacco growing and all activities connected with tobacco growing and the supply chain, and for ensuring respect for human rights for those working in connection with tobacco growing and the supply chain.

Principle 6: Partnership and collaboration should be pursued in the implementation of these policy options and recommendations, including in the provision of technical and/or financial assistance.

Adequate human, material and financial resources, where appropriate, should be available to establish and sustain the promotion of alternative livelihoods at local, municipal, national/federal, regional and international levels. To ensure sustainability of the programme, existing funding sources should be used and other potential sources explored, in accordance with Article 26 of the WHO FCTC. Where appropriate, parties should also consider to create incentives for promoting, supporting or shifting to alternate livelihoods and to avoid incentives for tobacco growing.

International cooperation, mutual support, cost-effective technology transfer and sharing of information, knowledge and relevant technical capacity are vitally important for strengthening the capacity of Parties to meet their obligations under Articles 17 and 18 of the WHO FCTC and to successfully counter the socioeconomic and environmental consequences of tobacco production at all levels. The obligation to cooperate in the development of effective measures, procedures and guidelines for implementation of the Convention, to cooperate with international and regional organizations and to use bilateral and multilateral funding mechanisms, derives from Articles 4.3, 5.4, 5.5, 20, 21 and 22 and 26 of the Convention.

4. IDENTIFYING AND DEVELOPING EFFECTIVE STRATEGIES FOR ALTERNATIVE CROPS AND LIVELIHOODS AND FOR PROTECTING TOBACCO GROWERS AND THE ENVIRONMENT FROM HARMS RELATED TO TOBACCO PRODUCTION.

Some of the reasons why farmers rely on tobacco cultivation include the following:

- delivery contracts are established between tobacco growers and first processors that give "security" to tobacco raw leaf sales, in some cases, first processors offer loans and other incentives for the cultivation of tobacco, and the tobacco industry creates a zone of comfort by ensuring a market and supplies;
- many agricultural communities are completely dependent on tobacco production and in many cases there is, at the local level, a symbiotic relationship between politicians, managers and the tobacco industry, which may explain, at times, lack of sufficient political will to develop alternatives at the local level;
- the belief among tobacco growers and workers that net profit from the tobacco crop is higher than for any other crop;
- beliefs and cultural habits – in some regions tobacco cultivation is carried out by succeeding generations, along with the transmission of cultural habits;
- uncertainties about alternative income opportunities and market opportunities for alternative crops, and lack of resources to invest in alternative crops;
- farmers are conservative in regard to changing established practices; and/or
- in regions where irrigation is inadequate or where there are adverse soil and climatic conditions, tobacco is grown because of its drought resistance and because under these agricultural conditions the net profit of tobacco is believed to be more than for any other.

Recommendations

Diversification strategies should include both agricultural and non-agricultural opportunities, including shifting from one agricultural product to another. Substitution of one economic activity by another does not, however, fully address the problem of the poverty and vulnerability of tobacco growers and workers, typical of economic agents from the primary sector.

Diversification strategies should encompass a vision of sustainable development of the agrarian sector. It should include diversified productive systems, e.g. production to achieve food security, short supply chains linked with local markets, and a combination of agricultural and non-agricultural activities.

Diversification strategies should increase the portfolio of activities and offered products – enlarging access to markets as an alternative to the seasonal constraints and stagnation of agricultural income. The strategies should also promote innovation and technical improvements on farms in order to save resources through new forms of handling and use of plants, livestock and land. This would result in an increase in the number of activities undertaken and in resources at farm level.

Diversification strategies should promote new forms of cooperation and local interaction that would reflect on scale of profits and reduction of transaction costs. These changes should produce new levels of satisfaction among the farmers, promote greater interaction with consumers/clients, and ensure more flexibility for adaptation.

Diversification strategies should be market demand driven and policies pursued should be based on market dynamics.

Regions with local diversified economic strategies should create environments favourable to sectoral integration between agriculture, commerce, industry and services. The regional diversity should produce greater stability and reduce vulnerabilities resulting from labour market fluctuations and sources of income. Economies of scale should reduce the costs of transaction and produce positive territorial externalities.

This transition period from tobacco growing to an alternative livelihood also demands the implementation of intersectoral initiatives that provide farmers with a broader array of resources and opportunities. Such initiatives should have a market orientation and not be based upon protectionist assumptions. This transition should promote development strategies that strengthen farmers' autonomy, diversify agricultural and non-agricultural incomes, transform the technical basis to allow a transition to agro-ecology, recover soil fertility and preserve biodiversity, produce territorial externalities, and pay attention to public health objectives.

4.1 Promoting research

Research should be undertaken where needed in a comprehensive way and should cover all elements linked with tobacco growing, including profitability, but also the health, environmental and socioeconomic costs. Furthermore, the quality of life that farmers obtain through producing different crops should be quantified and included in the analysis. The demand and market size of tobacco and other alternative crops need to be compared. Research should take into account the issues of environmental impact, development and poverty alleviation. Decision-makers need to be actively involved in the work of researchers. International organizations should also be encouraged to provide technical support to country-level research.

Research should include feasibility studies covering the following aspects:

- (a) **Identification of the profile and main features of the tobacco sector and economics of raw tobacco production.** This should include, where appropriate, a complete survey of all activities related to tobacco growing, including: number of tobacco growers and workers, size of holdings and number of tobacco growers and workers per size class, amount of tobacco production per holding and size class, age and gender distribution of the tobacco growers and workers, education level of the tobacco growers and workers, the tobacco variety produced, the number of tobacco workers employed by the tobacco farms, and the number of working days for family members and tobacco workers.
- (b) **Demand forecast studies on food crops.** For each country, where appropriate, a forecast should be undertaken of future food requirements, and the potential impact of food crops, vegetables, fruits or any other alternative crop, along with a price forecast for food commodities. Governments should also identify opportunities, such as existing programmes of food acquisition, where appropriate. Data of land-use patterns should be collected in tobacco-growing areas, to find out if land used for food crops has been transformed into tobacco-growing land or vice versa.
- (c) **Environmental and health impact studies** where appropriate. Each country should compare the impacts of tobacco growing to those of alternative crops, in respect of the levels of deforestation, forest degradation, water pollution, soil erosion and infertility levels, climate change effects, impact on wildlife and other ecological effects. The impacts should be linked to the fertilizers and agro-chemicals being used on tobacco and non-tobacco farms, to identify key sources of concern that policies need to address. Health impact assessment related to tobacco production should also be included as part of national health surveillance programmes.
- (d) **Economics of raw tobacco production** where appropriate. Up-to-date studies of tobacco economics for each region and variety should be undertaken, along with a study of tobacco prices at farm gate level for each country and each variety. Research should also focus on the economics of shifting to alternative land uses, including factors for tobacco growing or not growing as the case may be.

(e) **Standard information set for alternatives.** Where appropriate, for each identified alternative, a set of standard information should be obtained, including information on agricultural requirements, yield, value-added chain, standards, market, prices, international trade and other economic factors. For each identified alternative, where appropriate, a full feasibility study should be prepared. Internationally recognized experts may be invited to provide the required policy inputs on specific alternatives.

(f) **Priority list.** Based on the information obtained from steps (a) – (e), a priority list for each tobacco-growing region can be established of those alternatives that may be considered for field trials.

(g) **Field trials.** Where appropriate, field trials can be used to establish the economic viability of alternative crops. They should be conducted in the field with tobacco growers and workers and not on an experimental basis in the agricultural fields of research institutes or universities. Regular studies on alternative crops need to be taken up simultaneously in the major tobacco-growing regions before any conclusion regarding crop shifting can be drawn. The field trials should follow a standardized approach and methodology.

(h) **Development of a business plan.** Where appropriate, once the field trials have been successfully concluded and the farmers convinced about the alternative, a business plan should be developed including the transformation of the raw products into value-added products (the value-added chain).

The involvement of relevant organizations, including nongovernmental organizations, is essential. Information and support centres (see section 4.8), where appropriate, should also be operative by this stage and included in planning, training, and delivering services, including the evaluation of the field trials.

All information derived from steps (a) to (h) will require standardization of methodology and approach, for example a standardized questionnaire, and should also be made available in an international database (see section 6.5). Efforts should be made to transform research into action. This should include undertaking further research to bridge knowledge gaps, improve and develop new applications and market studies, and in this way to improve the market opportunities for alternative crops in favour of the tobacco growers and workers. This can be a task, where appropriate, undertaken by the information and support centres.

Experiences, studies, projects, field trials, etc already made should be taken as well into account. The funds may be raised through various sources including revenues from tobacco, in accordance to national laws.

Expected results

1. Information obtained on the current situation and trends in the tobacco production and economic chain worldwide, based on a standardized questionnaire, including the number of people involved in all activities, types of labour, and tobacco growers' livelihoods, among other relevant information.
2. Updated studies prepared of the environmental and health impacts of tobacco growing by region in each country.
3. Updated forecasts obtained of the demand for various relevant crops in relation to food security by country.
4. Comprehensive database created of the economics of raw tobacco production by region and variety, based on a standardized methodology.
5. Economically viable alternatives to tobacco identified along with data related to their respective economic chains.

6. Priority list of alternatives to tobacco for the field trials defined for each country, supported by research results obtained by research institutes or universities, based on a standardized methodology.
7. Business plan developed regarding the value-added chain of each identified alternative to tobacco by country.

4.2 Developing educational and training programmes for workers and growers

It is essential to understand the composition of the target groups in terms of gender, age, ethnicity and education level, when developing educational programmes. Research should be conducted, where appropriate, in the affected countries, and before shaping educational programmes, two main points may be taken into account.

1. Training of trainers is the best means of providing the skills needed in relation to alternative crops for tobacco growers and workers. The purpose of "cascade training" is to pass knowledge and skills to colleagues who work at different levels (e.g. the district or local level). In order to teach a trainer how to train well, a "learning by doing" approach is best. Moreover, interaction is invaluable for effective training. Farmers' associations should be supported to develop the skills needed by farmers in the production of new crops.
2. Good Agricultural Practices (GAP) for the growing of economically viable alternative crops should be integrated into agricultural curricula and in farmers' field schools education/training in tobacco-growing regions and in the training programmes of competent authorities.²⁵ Tobacco growing, as is the case with other crops, should adhere to the concept of GAP, which is recognized, where applicable, in Parties in relation to all the operations in cropping systems, including soil management, pest management, water management, as well as the use and application of agrochemicals, fertilizers and machinery.

The educational programme should also follow the principles of sustainable development in its three dimensions (social, economic and environmental) and include the building of capacities for managing natural resources sustainably, and the managing of new activities with lower negative environmental impacts, increased resource efficiency and reduced waste.

Education programmes should include the dissemination of information on the harmful health and environmental effects of tobacco growing, as much for consumers as for tobacco growers and workers. Information should also be provided to farmers regarding the options available for alternative crops, vocations and livelihoods, technical support, net gains, and the health, social, and economic benefits.

4.3 Removing obstacles to diversification or the shift to alternatives to tobacco farming

The economic feasibility of alternative crops is often the key to inducing small tobacco growers and workers to switch away from tobacco production. However, since tobacco also generates substantial revenue for governments, especially local governments, the political will to promote crops alternative to tobacco may not exist even if an alternative cash crop is able to produce higher profit than tobacco for farmers. In some cases, the tobacco industry tries to pre-empt the implementation of Article 17 of the WHO FCTC by convincing local governments to join their proposed diversification programme, which could consist of growing a subsistence crop between tobacco harvest seasons.

Parties should, where appropriate, mitigate or remove any obstacles identified that prevent farmers from leaving tobacco farming, which may include tobacco-related debts, bonded labour, and/or child labour. Parties addressing such concerns include facilitating the creation of institutions to help in this regard, strengthening existing international instruments, such as ILO conventions, and providing the necessary options to farmers. There are three main obstacles:

²⁵ Good agricultural practices – a working concept. Rome: Food and Agriculture Organization of the United Nations; 2004 (FAO GAP Working Paper, No.5; <http://www.fao.org/prods/gap/Docs/PDF/5-GAPworkingConceptPaperEXTERNAL.pdf>).

1. Limited financial resources to maintain regional activities in states and municipalities. This barrier should be overcome by implementation of a long-term financial framework and/or by including diversification programmes in tobacco-growing areas in national rural development policy (see section 6.3).
2. Tobacco industry lobbying in legislatures and with policy-makers.
3. The socioeconomic situation of tobacco growers and workers. Most tobacco growers and workers, particularly in developing countries, have very limited land property or have access to arable land only through renting or share cropping. Therefore they need a crop with high profitability. In most cases, tobacco growers lack the funds to invest in their farms to make other crops viable. In addition many tobacco growers also receive loans and assistance from the first processors in concluding a supply contract for raw tobacco delivery. Such loans are strong incentives for the farmer to cultivate tobacco. It is possible that in any setting the farmers are vulnerable and trapped frequently by the tobacco industry in a vicious circle of debt. It is difficult to break that circle and it must be acknowledged as being one of the challenges to be overcome, mainly with the support of governmental programmes/policies.

4.4 Keeping coherence among the policies of different ministries/departments

Intersectoral coordination is desirable to ensure that all of the sectors involved in tobacco growing, support crop diversification and alternative livelihoods. Parties should make efforts to ensure coherence among the policies of different ministries/departments or equivalent bodies, in accordance with the WHO FCTC, to generate synergy in their activities.

Coherence and coordination among the various funding mechanisms and initiatives related to sustainable development are also crucial for supporting diversification in tobacco-growing areas. Channels should be created for redirecting the funds into diversification and rural development activities, including alternative livelihoods. Public financing and incentives directly linked to tobacco growing should be discontinued, in accordance with national law and policies, taking into account possible adverse impact on tobacco growers.

Proposed actions

1. Tobacco-growing countries should not encourage and not provide any incentives to increase the acreage of land used for cultivating tobacco.
2. Tobacco-growing countries should consider reallocating public funds/subsidies used for tobacco production to alternative livelihoods activities.

4.5 Identifying and regulating tobacco industry strategies that promote tobacco farming and the manufacture of tobacco products

Where appropriate, Parties should develop policies that protect tobacco growers and workers from any tobacco industry practices that would fix prices or conditions that are disadvantageous to farmers, and from violations of labour rights and other malpractices carried out under the guise of "corporate social responsibility".

Civil society organizations can be important allies in monitoring and denouncing these malpractices.

Parties should, using appropriate instruments, create or improve regulatory mechanisms for the control and inspection of industry activities concerning labour relations and workers' health.

Parties should identify and regulate **crop production** practices that lead to environmental degradation. They should develop policies to promote farmers' autonomy, and apply corporate social responsibility rules in relation to farmers. It is important, therefore, to conduct awareness raising programmes for local partners and farmers on the benefits of alternative livelihood(s) in the short, medium and long term.

4.6 Mainstreaming alternative crops/livelihood options into government rural development programmes

Mainstreaming alternative crop and livelihood options, where appropriate, should be part of the wider agenda of governments and should be incorporated into multi-year planning in line with rural development policies and food security requirements. It is important to build mechanisms for promoting the effective participation of state and municipal governments, given their relevance to activities directly related to farmers. Governments should guarantee comprehensive and long-term governmental action in this regard, in line with Article 5 of the WHO FCTC.

4.7 Establishing mechanisms within the existing system to support alternative livelihoods

During the transition period from tobacco growing, the existence of public policies with intersectoral approaches is essential, in order to give full access to existing resources and opportunities. These policies must not assume any protectionist outline but should offer governmental support to the farmers through mechanisms for strengthening the decision-making process and making easier the identification of challenges to be tackled and needs to be addressed.

Tobacco growers and workers should be involved in decision-making and must therefore be given adequate channels to voice their needs and concerns (see Principle 2 in *Guiding principles*).

The following is a non-exhaustive list of examples of measures that can be used to promote the shift to alternative livelihoods among tobacco growers and workers, as appropriate, in national settings.

- **Rural credit** (investment and defrayment of costs) – with an emphasis on credit for investment and with a grace period and terms consistent with the diversification or conversion programmes. Emphasis should be placed on credit programmes that enable value aggregation by the farmers themselves, by means of cooperative, associative or family agro-industries.
- **Food acquisition for food security programmes** – which should allow purchase for institutional markets (such as schools, hospitals and prisons), besides enabling purchases for simultaneous distribution and for the formation of buffer stocks.
- **Family farming price assurance** – as a way of securing income, and associated with family farming agrarian insurance.
- **Technical assistance and rural extension** – which should be comprehensive and qualified, and integrate state organizations, nongovernmental organizations and the farmers who are able to disseminate experience and knowledge.
- **Agrarian reform and credit** – taking into account the fact that many tobacco growers are partners and leaseholders, or owners of very small land areas.
- **Social and economic organization** – to find out which possible alternative crops/activities would be able to provide similar income to farmers or growers at similar levels of employment in tobacco-growing areas.
- **Infrastructure and services** – to ensure that tobacco growers willing to move from tobacco to other crops are given necessary support for this alternative value chain.
- **Crop and income insurance** – to create national crop insurance companies that promote economic stability of agriculture through a reliable and viable system of crop production.
- **Cooperatives** – programmes should be established to strengthen farmer cooperatives that facilitate the shift to alternative crops and livelihoods, especially through the involvement of nongovernmental organizations. It is strongly recommended that post-evaluations be conducted

in respect of farmers who have successfully shifted to other crops, and that such information be made publicly available.

- **Promotion activities** – where appropriate, should be steered by a tobacco-alternative crops board, like the tobacco, coffee or tea boards that exist in some countries.

Productive diversification in tobacco-growing regions is a safe means of emancipating farmers from dependence on tobacco growing, especially the poorest ones. In order to successfully achieve this aim, the process must be sustained on the basis of: (a) the correct understanding of the decision-making process of farmers engaged in tobacco growing; (b) a strategy of intervention that encompasses actions supported by public policies that facilitate awareness raising and motivate farmers to enter into alternate livelihoods and new supply chains with sustained demands for their produce.

Appendix 2 describes the core elements of a methodological framework for building the dynamics of productive diversification in tobacco-growing regions.

4.8 Setting up information and support centres for alternative livelihoods

The need for alternative livelihoods for tobacco growers and workers differs among countries. The knowledge required for the cultivation, transformation, processing and marketing of food crops grown as alternatives to tobacco in the context of diversification for food security will usually be available in the countries concerned. The growing of already cultivated and known cash crops in these countries should also not present major problems. However, the growing of other alternative crops, such as those for biofuel, or new alternative cash crops, will require the establishment of information and support centres to provide cultivation and production expertise, technical assistance, market intelligence, and new varieties and breeds. The information and support centres should also act as background and reference laboratories.

As diversification of tobacco cultivation is a long-term task, financial support for the information and support centres undertaking this work should be ensured to be continued for several years to facilitate sustainable diversification and alternative livelihoods.

4.9 Ensuring the participation of civil society

The formulation, implementation and assessment of diversification programmes should involve the effective participation of family farming organizations and other civil society organizations that support the objective of the WHO FCTC. Nongovernmental organizations are likely to play an important role in the process of participatory planning in the methodological framework for building the dynamics of productive diversification in tobacco-growing regions (see Appendix 2).

Nongovernmental organizations can also be important allies in working in partnership with farmers to disseminate information about the numerous hidden economic, environmental and social costs of tobacco growing, besides monitoring and denouncing the abusive practices of the tobacco industry. They can also help farmers gain access to institutional and technical support and facilitate the creation of self-help groups and cooperatives, as well as disseminating the concept of agro-ecology among farmers.

4.10 Ensuring social, health and environmental protection in tobacco-growing regions

- **Tackling child labour and promoting decent work in tobacco-growing regions.** Any existing bonded labour or child labour in tobacco growing should be opposed and if possible ended. There are several relevant international instruments. Where applicable, Parties should promote the ILO Decent Work Agenda, and apply to the tobacco growing and industry the fundamental ILO conventions on the subject, Conventions 29 and 105, as well as Convention 182. These instruments deal with the prohibition of forced or compulsory labour in all its forms, including for children aged less than 18 years. Parties should, if they have not yet done so, adapt their domestic legal frameworks to comply with relevant international instruments. They should reinforce labour inspections and sanctions against violations of such provisions in the

agricultural sector, including tobacco. Simultaneously, solutions to this problem could be addressed by investigating and improving price-setting mechanisms (through collective bargaining and better contract practices, including the introduction and enforcement of labour rights in contracts). Further efforts should also be made to eliminate the exploitation of children and women, in particular.

- **Protecting tobacco growers' and workers' health.** Data generated by research on the harms caused by tobacco growing should be compiled and shared with all relevant stakeholders, including farmers. Effective education, communication and public awareness programmes on the occupational risks related to tobacco growing should be developed through a comprehensive multisectoral approach.

Initiatives in this area should include programmes of family health and training of community health workers in prevention, early diagnosis and treatment of cases of green tobacco sickness, pesticide poisoning, and other health problems related to tobacco growing.

Tobacco-growing harms should be included in the list of occupational diseases in the national public health system as well as in domestic legislation on security and health in rural work.

- **Protecting the environment from the harms of tobacco growing.** Parties should undertake, where appropriate, initiatives to monitor deforestation, and soil and water contamination with pesticides in tobacco-growing areas. Awareness-raising campaigns and educational programme on the harms posed by tobacco production to the environment should also be developed as part of national initiatives to promote diversification of production in tobacco-growing areas. In line with national law on environmental protection, Parties should undertake measures to prevent or to recover areas already damaged by tobacco production.

5. MONITORING AND EVALUATION

Monitoring and evaluation are key elements of the planning process for implementation of Articles 17 and 18. Article 17 aims to promote, as appropriate, economically viable alternatives for tobacco workers, growers and, as the case may be, individual sellers in order to reduce economic dependence on tobacco. Article 18 aims to mitigate the health and environmental harms related to tobacco production.

For each policy to be implemented it is necessary to identify and diagnose the baseline situation which the policy is addressing to achieve a positive change. It is also important to identify who or what is affected by the problem, the needs among stakeholders and potential barriers to policy implementation, as well opportunities to overcome them. The measurable effects caused by the problem that could be mitigated by the intervention by the Party should be identified and monitored. It is also important to identify indicators against which the progress made by the policy/programme towards its main objectives can be monitored.

This involves using a systematic method for collecting, analysing, and using information to answer questions about the implementation of the policy/programme, and particularly about its expected outcomes aiming at achieving continuous development and improvement.

In this context, three kinds of indicators are needed to monitor and evaluate progress in the implementation of Articles 17 and 18:

- situation analysis – baseline assessments;
- process to be undertaken to change the situation; and
- expected outcomes.

The monitoring elements presented in this chapter are only examples and are by no means exhaustive.

5.1 Implementation of Article 17 – development of an alternative livelihood model

For a complex task, such as implementing the methodological framework for building the dynamics of productive diversification in tobacco growing regions (see Appendix 2) within an agreed period of time, a good evidence base is a fundamental requirement. A first step is to make an analysis of the baseline situation of the problems to be addressed by the policy and to capture the elements needed to develop a strategic plan such as barriers and opportunities, including market information, region-specific conditions, and a better understanding of how farmers will decide on diversification alternatives, among other elements.

The following is a schematic example of a possible framework.

5.1(a) Conducting a baseline analysis of the problems to be addressed by the policy

Situation analysis (How is it now?)	Process (Actions required to address the situation)	Outcome (Measurable progress)
Which data/research have been collected/undertaken in your country to obtain a better understanding of tobacco production economics, such as profitability, extent of land used, and characteristics/dynamics of the tobacco productive chain?	<p>Collect data for an inventory on the use of land for tobacco and for other crops and rural activities.</p> <p>Collect data on the economics of tobacco production in each region, including price monitoring and characteristics of the tobacco productive chain.</p> <p>Undertake modelling evaluation of socioeconomic impact of tobacco growing, including the impact on income, labour, health and environment for each tobacco growing region.</p>	<p>Analysis of the acreage of land used for tobacco, and for other crops and rural activities.</p> <p>Comprehensive database of the economics of raw tobacco by region and variety.</p> <p>Comprehensive analysis of how the tobacco production chain is organized.</p>
Are there any data on the labour market in tobacco growing in your country?	Collect data on labour involved in tobacco and in other rural activities and the level of economic dependence on the tobacco productive chain among farmers.	Data on how many farmers are involved in tobacco growing, including their level of economic dependence on the tobacco productive chain.

5.1(b) Analysis of the main barriers and existing opportunities to be considered in the design of a strategic plan for implementation of Article 17

Situation analysis (How is it now?)	Process (Actions required to address the situation)	Outcome (Measurable progress)
Are there any demand forecast data on food crops and on other rural activities to support diversification in your country?	Collect data and undertake modelling demand forecast.	Updated forecast of the demand for crops in relation to food security in the country.

Situation analysis (How is it now?)	Process (Actions required to address the situation)	Outcome (Measurable progress)
<p>Is there any standard information set for potential alternatives to tobacco growing in your country?</p>	<p>Develop feasibility studies on potential alternatives to tobacco growing, considering agricultural requirements, climate conditions, yield, value-added chain, standards, market, prices, international trade and other economic factors, and health, social and environmental impact.</p> <p>Develop field trials to establish economic viability of alternative crops.</p> <p>Conduct modelling evaluation of the socioeconomic impact of potential alternatives to tobacco growing including their impact on income, labour, health and the environment, for each tobacco growing region.</p>	<p>Standard information set for potential alternatives to tobacco growing.</p> <p>Models for implementing alternatives crops or other activities including an impact analysis of labour demand by alternative livelihood models in tobacco growing regions</p>
<p>Which data/research were collected/ undertaken to acquire a better understanding of the livelihoods of tobacco growers and to map obstacles for diversification in your country? (see methodological framework provided in Appendix 2)</p>	<p>Map the key stakeholders in tobacco production and alternative activities.</p> <p>Conduct surveys among tobacco growers, policy-makers and other key stakeholders in order to capture their beliefs, attitudes, behaviour and decision-making processes on tobacco growing and shifting to other activities.</p> <p>Perform needs assessment through research and regular consultation with stakeholders and with the people that will benefit from the policy, in a bottom-up approach to identify the needs and potential barriers to be overcome.</p>	<p>Analysis of the socioeconomic profile of tobacco growers and on their decision-making process as well as on the current relationship among stakeholders in tobacco production and in potential alternative activities.</p> <p>Analysis of the main barriers and opportunities to be considered for the strategic plan to promote alternatives to tobacco.</p>
<p>Which mechanisms exist in your country to support farmers and agricultural development? How accessible they are to farmers?</p>	<p>Collect information on how these mechanisms could or already operate to support diversification in tobacco growing regions.</p> <p>Collect data on how many tobacco growers and workers have already being supported by these mechanisms for diversification activities.</p> <p>Collect data on knowledge and perceptions of tobacco growers and other stakeholders on these mechanisms as well as on the existence of barriers to access them.</p>	<p>Analysis of the existing mechanisms to support diversification in tobacco growing areas, on how they are accessed by farmers, and on the numbers of tobacco growing farms that benefit from these mechanisms.</p>
<p>Does your country have information and support centres for alternative livelihoods for tobacco growing regions?</p>	<p>Collect information on the activities that the support centres undertake to promote alternative livelihoods in tobacco growing regions.</p>	<p>Report on the implementation of information and support centres in tobacco growing regions.</p>

Situation analysis (How is it now?)	Process (Actions required to address the situation)	Outcome (Measurable progress)
<p>Does your country have a national programme to promote food security?</p> <p>Does it purchase food for institutional markets such as public schools, hospitals, prisons?</p>	<p>Collect data on national programmes to promote food security and purchasing policies.</p>	<p>Updated information on the existence of national programmes to promote food security and their potential to purchase products that result from the diversification process in tobacco growing areas.</p>
<p>Does the tobacco industry have channels to influence tobacco farming as part of agricultural development policies?</p>	<p>Take steps to insulate the agricultural policy from tobacco industry interference.</p> <p>Disseminate information on Article 5.3 as an obligation under the WHO FCTC, including in relation to implementation of Articles 17 and 18.</p>	<p>Increased level of awareness among tobacco growers and other stakeholders of Article 5.3, the guidelines for its implementation and its rationale.</p>
<p>Does your country have a national programme to promote and support diversification of activities in tobacco growing regions?</p>	<p>Collect information on existing national diversification programmes, what/who are the key institutions and actors, what are the main objectives and goals, how many tobacco growers have already been benefited, how are they financed and how much are their yearly budgets.</p> <p>Collect information on how these policies are disseminated among tobacco growers and other stakeholders.</p> <p>Develop and implement a national policy for implementing Article 17.</p> <p>Mainstream the national plan/programme/policy into the governmental rural development agenda and food security programmes.</p>	<p>Report on the implementation of the national programmes for diversification in tobacco growing areas.</p> <p>Number of tobacco growers shifted to alternative crops and other livelihoods.</p> <p>Level of dependence on the tobacco productive chain among the remaining tobacco growers.</p> <p>Improving human and working capital.</p> <p>Improved livelihood Better working conditions.</p>
<p>Does your country have a national programme to promote and support diversification of activities in tobacco growing regions?</p>	<p>Implement a long-term financial framework for the policy.</p> <p>Develop educational and training programmes for tobacco growers.</p> <p>Provide technical assistance and rural extension.</p> <p>Ensure the participation of civil society in line with Article 5.3 of the WHO FCTC.</p>	<p>Amount of tobacco acreage shifted to alternative crops or other activities.</p> <p>Number of tobacco growers and workers educated and trained (increased level of awareness and knowledge).</p>

5.1(c) Suggested Impact indicators for Article 17

- Number or percentage of tobacco growers impacted by these measures by diversification strategies and measures, fully shifted to alternative crops and other livelihoods.
- Number or percentage of tobacco growers impacted by these measures by diversification strategies and measures partially shifted to alternative crops and other livelihoods.
- The number of programs and policies that promote alternative livelihood for tobacco growers and workers.
- Any other indicators showing changes of economic and social status impacted by these measures.

5.2 Implementation of Article 18

Article 18 addresses health and environmental impacts related to tobacco production as well as social issues. Regarding the environment, a standardized approach should be developed by Parties for conducting audits of the environmental impact of tobacco growing, to be carried out in all countries concerned, to enable the correct actions to be carried out to achieve the positive effects expected. Information and support centres located in regions where tobacco is grown would enable growers to learn about the effects of tobacco on the environment as well as on their health and economic status. Initiatives to rehabilitate the affected regions, should be promoted, as appropriate, including reforestation programs. For the known health risks related to tobacco farming it is important to have a baseline analysis of the prevalence of green tobacco sickness and of other harms related to tobacco production so that the impact of the actions to be performed in relation to Article 18 can be monitored. For identified alternatives, environmental assessments should be also conducted to prevent a negative (their) environmental and health impact compared to tobacco.

The first step to achieving these aims is to analyse the baseline situation of the problems that will be addressed by the implementation of Article 18, as well as an analysis of the main barriers and existing opportunities to be considered in the design of a strategic plan for implementation of this policy. It is important to highlight the fact that the simultaneous implementation of Articles 17 and 18 should create synergy in motivating and supporting growers in moving towards diversification. All results of environmental audits and health data collection related to tobacco production and to identified alternatives should be made available through an international database. The following is a schematic example of a possible framework.

5.2(a) Making a baseline analysis of the problem to be changed by the policy

Situation analysis (How is it now?)	Process (Actions required to address the situation)	Outcome (Measurable progress)
Has your country executed studies on the health impact related to tobacco production in your country?	Collect data and information or develop studies on the impact of tobacco production on farmers' health.	Data concerning prevalence of green tobacco sickness and other harms related to tobacco production. Data concerning prevalence on use of personal protective equipment among tobacco farmers.
Has your country executed studies on the environmental impact of alternatives to tobacco growing?	Model the impacts of alternative crops on fertilizer demand, pesticide use and deforestation in comparison with tobacco growing.	Impact analysis of the environmental impact of alternatives to tobacco growing.
Are there any data or information on the social impact of tobacco growing <u>in your country</u> ?	Collect data on child labour and conditions of work involved in tobacco production.	Data on child labour and conditions of work involved in tobacco production.

5.2(b) Analysis of the main barriers and existing opportunities to be considered in the design of a strategic plan for implementation of Article 18.

Situation analysis (How is it now?)	Process (Actions required to address the situation)	Outcome (Measurable progress)
Does your country have a national programme or policies to address occupational risks related to tobacco growing and manufacturing?	<p>Collect information on existing national initiatives to manage green tobacco sickness and other harms related to tobacco production as part of the national health workers policy or programme.</p> <p>Educate tobacco growers on the harms related to tobacco production.</p> <p>Promote or enhance the inclusion of green tobacco sickness and other harms related to tobacco production as part of national workers health policy or programme.</p>	<p>Harms and diseases related to tobacco production included as part of national health workers policy.</p> <p>Increased knowledge of health risks related to tobacco production and the use of personal protective equipment among tobacco growers and workers.</p> <p>Decrease in the prevalence of green tobacco sickness and other harms related to tobacco production.</p>
Does your country include tobacco production in the inspection of compliance to national labour laws?	<p>Include tobacco production in the national inspection of labour codes.</p> <p>Involve civil society organizations in monitoring of malpractices.</p>	General improvement in the fairness of labour contracts and labour conditions in the tobacco productive chain.
Does your country have a list of allowed pesticides for use in tobacco cultivation?	<p>Compile such a list for pesticide use in tobacco cultivation according to environmental and toxicological risk assessment.</p> <p>Check the list to see if the allowed pesticides for tobacco cultivation is in accordance with the latest environmental and toxicological risk assessment.</p>	Reduced environmental impact as the list of allowed pesticides for use in tobacco cultivation is updated according to the latest information on environmental and toxicological risk assessment.
Does your country have a monitoring system for soil and water contamination by pesticides and fertilizers	Execute a monitoring in tobacco growing regions and compare it with other regions where tobacco is not grown.	Impact analysis on soil and water contamination.
Has your country executed studies on the extent to which deforestation or forest degradation is due to tobacco cultivation?	Collect data and quantify deforestation and forest degradation due to tobacco cultivation (change of land use and for curing purposes).	Impact analysis of deforestation and forest degradation based on tobacco cultivation requirements.
Does your country have a national programme or policy or legislation on environmental protection?	<p>Collect information on existing national initiatives and legislation to audit and mitigate environment harms.</p> <p>Promote the inclusion of tobacco growing areas in the list of areas to be audited by national programmes to mitigate environmental harms.</p>	<p>Tobacco production audit included in legislation, programme or policy controlling deforestation, water and soil contamination and the amount of pesticide residues in or on tobacco crops and the contamination of the tobacco crops and fertilizers by heavy metals.</p> <p>Reduction in forest degradation and deforestation, and improvement of the conditions of natural resources and the environment in tobacco-growing areas as well in the alternative crops areas.</p>

5.2(c) Suggested impact indicators for Article 18

1. Prevalence of green tobacco sickness and of other harms, e.g. pesticide poisoning, specifically linked to tobacco production in tobacco growing areas.
2. Number or percentage of child labour in tobacco growing areas.
3. Percentage of the loss of forest area due to forest degradation and deforestation in tobacco growing areas and in alternative crop areas.

6. INTERNATIONAL COOPERATION

Parties to the WHO FCTC have already made several important commitments with respect to international cooperation, including those found in Article 4 (Guiding principles), Article 5 (*General obligations*), Article 19 (*Liability*), Article 20 (*Research, surveillance and exchange of information*), Article 21 (*Reporting and exchange of information*), Article 22 (*Cooperation in the scientific, technical, and legal fields and provision of related expertise*), and Article 26 (*Financial resources*).

International cooperation should also be guided by the provisions of United Nations General Assembly resolution A/RES/66/288, "The future we want".

In the context of the commitments contained in the WHO FCTC and of these policy options and recommendations, international cooperation should include the aspects described below.

6.1 Promotion of opportunities for economically sustainable livelihoods and development of markets in the context of sustainable development and poverty eradication

Parties should exchange information and experiences, including best practices, to promote economically sustainable alternative livelihoods. Parties should also make efforts to establish relationships with actors in domestic, regional and global markets, with a view to understanding the relevant supply and demand considerations, including the market requirements for alternative crops. Any alternative crop should be in harmony with efforts to ensure sustainable management of natural resources.

6.2 Cooperation with relevant national, regional and international organizations

Parties may consider, in cooperation with relevant national, regional and international organizations, neither encouraging nor promoting tobacco production, in line with Article 5.3 of the WHO FCTC.

International cooperation should facilitate mechanisms for implementation of alternatives to tobacco growing and should also promote global efforts to ensure higher production of agricultural commodities and therefore enhance food security.

Proposed actions:

1. Regional and international organizations, within their respective mandates, , upon request, support tobacco-growing countries in implementing alternatives to tobacco growing including, when necessary the convergence of global efforts to ensure higher production of food commodities.
2. Regional and international organizations, within their respective mandates, upon request, support and cooperate with tobacco-growing countries in reinforcing or strengthening the implementation of relevant existing and applicable international instruments relating to labour, the environment, health and human rights.

6.3 Assistance and cooperation in capacity building

Parties should cooperate with each other directly and/or through competent international organizations, in providing training and technical and financial assistance, and should cooperate in scientific, technical and technological matters, including the transfer of expertise or appropriate technology in the field of economically alternative livelihoods, such as crop production and market intelligence. It is important that international organizations with specific expertise participate in capacity building for economically sustainable alternative livelihoods, especially agencies that have recognized expertise in this area, such as the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), World Bank, UNCTAD and ILO. Parties may request support from competent international organizations.

Parties are encouraged to enter into bilateral, multilateral or any other agreements or arrangements in order to promote training, technical assistance and cooperation in scientific, technical and technological matters, taking into account the needs of developing country Parties and Parties with economies in transition. Financial resources are an essential part of such cooperation. Parties are also encouraged to allocate funds to promote alternatives to tobacco growing, as the case may be, considering that currently governments have allocated less than 0.5% of global tobacco tax revenue.

Proposed action: Parties should implement the measures proposed in Article 26 of the WHO FCTC (*Financial resources*).

6.4 International information exchange

Parties should, in cooperation with relevant international organizations and the Convention Secretariat, establish and implement an information exchange system on sustainable alternative livelihoods and global tobacco leaf demand. This information exchange would draw on official information made available by Parties and international organizations and should be coordinated by the Convention Secretariat. This should lead to the creation of a database or similar resource on available best practices in different countries, so that these experiences may be used by other countries. Parties should use the WHO FCTC reporting instrument to report on implementation of Articles 17 and 18 of the Convention within the framework of the already established reporting cycle.

Expected results: Information available in Parties' implementation reports on best practices in relation to Articles 17 and 18 is made available to Parties for further research.²⁶

6.5 International cooperation and the role of the Convention Secretariat

The Convention Secretariat facilitates collaboration between Parties and intergovernmental and nongovernmental organizations, and should ensure that it does so in regard to the effective implementation of Articles 17 and 18. The Secretariat should invite international organizations with specific expertise in this area to participate in the activities of the working group or other future intergovernmental mechanisms established by the COP, especially agencies that have recognized expertise in this area, such as FAO. The Secretariat should also work with relevant networks and institutions, in different geographical settings and in cooperation with FAO and other international organizations that are engaged in research on alternative crops, at global, regional and subregional levels. The Convention Secretariat should coordinate information exchange, which would draw on official information made available by Parties and international organizations. In order to bring synergy to such activities and efforts, the Secretariat should actively engage interested Parties and to appropriate institutions and networks in order to facilitate a systematic and comprehensive approach to implementation of Articles 17 and 18.

²⁶ The database is available at <http://apps.who.int/fctc/reporting/database/>.

APPENDIX 1

LIST OF STANDARDIZED TERMS IN RELATION TO ECONOMICALLY SUSTAINABLE ALTERNATIVES TO TOBACCO GROWING

- **Cropping system:**^{1,2} Describes how a producer grows crops. Cropping systems include: crop rotation, multiple cropping, mixed-cropping, strip-intercropping and related agronomic practices.
- **Diversification:** The creation of a strategy portfolio that allows the reduction of dependence on a single crop and instability in the process of reproduction caused by faults in production activities, such as losses of harvest due to droughts or floods, and the variability of seasonal income throughout the year.
- **Economically sustainable alternatives:** Aim to meet human needs while preserving the environment so that these needs are met not only in the present, but also for generations to come.
- **Environmental audit:**²⁷ A process to verify the effectiveness of the environmental management programme, ensure that environmental objectives and targets are being met, and evaluate how the environmental management system should be modified and expanded in the context of future business expansion, new environmental legislation, and emerging environmental issues.
- **Environmental impact assessment:**²⁸ A procedure for evaluating the likely impact of a proposed activity on the environment.
- **Environmental monitoring:** Site-specific continuous assessments of changes to environmental quality.
- **Environmental restoration:** Deliberate attempt to speed recovery of damaged ecological areas.
- **First processor or leaf company:** Buyer of the raw tobacco from farmers for a first transformation of the tobacco leaves, grading the raw tobacco into different qualities.
- **Food security:**²⁹ The availability of food and people's access to it.
- **Good Agricultural Practices:**³⁰ Practices that ensure that agricultural products are of high quality, safe and produced in an environmentally and socially responsible way.
- **Green tobacco sickness:** Nicotine poisoning that results from the absorption of nicotine through the skin from contact with tobacco plants during cultivation and harvesting. Nicotine is a water and lipid-soluble alkaloid that dissolves in any water on the leaves of the green tobacco plant.³¹
- **Human capital:** The stock of competencies, knowledge and personality attributes embodied in the ability to perform labour so as to produce economic value; the attributes gained by a person through education and experience.
- **Impact on the environment:**³² Any effect caused by a proposed activity on the environment including on human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments

²⁷ Source: United Nations Environment Programme.

²⁸ Source: United Nations Environment Programme.

²⁹ Trade reforms and food security. Rome: Food and Agriculture Organization of the United Nations; 2003.

³⁰ World programme for the census of agriculture: A system of integrated agricultural censuses and surveys (FAO Statistical Development Series). Rome: Food and Agriculture Organization of the United Nations; 2005.

³¹ Arcury TA, Quandt SA. Health and social impacts of tobacco production. *Journal of Agromedicine*. 2006;11:71-81.

³² Source: United Nations Environment Programme.

or other physical structures, or the interaction among these factors; it also includes effects on cultural heritage or socioeconomic conditions resulting from alterations to those factors.

- **Individual capacities/capabilities:** A process through which individuals strengthen and maintain their capabilities to set and achieve their own development objectives over time.
- **Intercropping** is the practice of growing two or more crops in proximity. The most common goal of intercropping is to produce a greater yield on a given piece of land by making use of resources that would otherwise not be utilized by a single crop.
- **Row cropping** involves arranging the associated crops in rows whereby one crop is alternated with one or multiple rows of another crop.
- **Crop rotation** is the practice of growing a series of dissimilar/different types of crops in the same area in sequential seasons. Crop rotation gives various benefits to the soil. A traditional element of crop rotation is the replenishment of nitrogen through the use of green manure in sequence with cereals and other crops. Crop rotation also mitigates the build-up of pathogens and pests that often occurs when one species is continuously cropped, and can also improve soil structure and fertility by alternating deep-rooted and shallow-rooted plants.
- **Intersectoral approach:** Works across different sectors – social, economic and institutional.
- **Livelihoods:** Refers to the process in which rural families build a diversified portfolio of activities and abilities of social support in order to survive and improve living conditions.
- **Productive system:** A system that transforms inputs into an output. Inputs into a productive system include human resources, land, equipment, buildings and technology. Outputs include the goods and services that are provided for customers and clients.
- **Tobacco crop:** Cultivation of *Nicotiana tabacum* and *Nicotiana rustica* for sale either under a contractual arrangement, non-contractual arrangement\open-market or a quota system.
- **Tobacco industry:**³³ Tobacco manufacturers, wholesale distributors and importers of tobacco products.
- **Tobacco products:**³⁴ Products entirely or partly made of the leaf tobacco as raw material which are manufactured to be used for smoking, sucking, chewing or snuffing.
- **Tobacco worker:** A person working on a tobacco farm, in tobacco processing, or tobacco or bidi manufacturing, with or without a contractual arrangement based on the labour laws of the country in which s/he is employed.

³³ Definition taken from the WHO FCTC.

³⁴ Definition taken from the WHO FCTC.

APPENDIX 2

METHODOLOGICAL FRAMEWORK FOR BUILDING THE DYNAMICS OF PRODUCTIVE DIVERSIFICATION IN TOBACCO GROWING REGIONS

1. INTRODUCTION

This appendix aims to present the core elements and the sequence of the actions of a methodological template for productive diversification in tobacco growing regions. This methodology is based on the premises that farmers should be free to build life projects that emancipate and fulfil them, that this intent must be supported by public policy and that the success of redesigning productive systems depends on the active participation of relevant social and economic actors.

2. METHODOLOGICAL GUIDELINES

2.1 *Bottom-up approach*

Considering that the decision to undertake productive diversification is, first and foremost, to be taken by the farmers, there is no possibility of success without their participation in setting the strategy to be followed.

2.2 *Networks of stakeholders*

Agriculture is not an isolated socio-productive phenomenon, but a phenomenon involving different and interdependent social agents articulated around supply chains and local conglomerates. Thus, a process of productive diversification involves, besides farmers, a number of other subjects, which may have congruent interests and, to the extent that they are called upon to participate, are able to join forces for constructing new chains and marketing channels.

2.3 *Integration of different levels of government (local, regional and national)*

Productive diversification requires a range of supporting policies and actions that encompass all levels of government, in order to join efforts and leverage resources for reaching more meaningful results.

2.4 *Participatory planning and implementation*

The success of this process depends on the active participation of relevant socioeconomic factors and actors at all stages. Thus, its implementation must be triggered on the basis of a set of articulations that select, prioritize and commit the parties to the planned strategy with the participation of all relevant stakeholders.

2.5 *Territorial approach*

While working with diversification, it should be clear that the various agricultural products fall into chains of production and consumption, which in most cases reach beyond the local circuit. Thus, both in terms of allocation of resources and scale of production, infrastructure and distribution, as well as the viability of markets for the products, the territorial regional approach allows stakeholders to involve and mobilize the necessary resources.

2.6 *Ongoing monitoring and evaluation*

The productive diversification, according to the methodology in question, is embodied in a participatory process that triggers a set of activities, which, in turn, are dependent on public policy. Therefore, as they

involve different actors with different responsibilities and expectations, ongoing monitoring and evaluation are essential to ensure ongoing participation and commitment of the parties, with benchmarking and rescheduling of activities.

3. GETTING STARTED IN THE PROCESS: CHAINING ACTIONS

3.1 *Mobilization*

Considering that participatory planning, monitoring and evaluation are core elements of this methodological framework, its starting point depends on a presentation of the purposes and strategies for productive diversification, seeking convergences of interests among stakeholders of the communities involved.

Therefore both awareness raising by mass media (radio, television, press, etc.) and visits to civil society organizations and farms should be employed to raise awareness and provide information. As a general guideline, it is important to seek collective debate and dialogue in spaces such as community meetings, meetings with civil society organizations, meetings with representatives of local government, etc. Once information and procedures are agreed among stakeholders, a common agenda for action and monitoring should be established.

3.2 *Analysis of the situation*

To reach the objectives of productive diversification it is crucial to have specific information for the identification of goals, resources, responsibilities, deadlines, etc. Thus, the planning should start from an analysis of the agrarian system of tobacco growers and workers. Based on this information, an analysis should be made of the decision-making process of farmers, taking into account their plans, constraints, perspectives, orientation on tobacco growing, and possibilities.

From this perspective, it is important to consider that, on the one hand, the productive systems employed by farmers derive from objective parameters such as availability of means of production and profitability of crops, and on the other hand, from subjective and social questions.

Such an analysis can be developed by using a questionnaire, and, if experimental data are available, carrying out an impact assessment addressing multidimensional issues through the following key parameters:

- family composition;
- availability of natural resources;
- availability of means of production;
- agricultural and livestock production systems on the property (except tobacco);
- subsistence goods produced;
- financial income from the marketing of different products (other than tobacco);
- system of production and financial performance related to tobacco;
- access to services and public policies;
- access to credit and other banking services;
- organization and social participation;

- economic and social partners;
- family and community values and priorities;
- health status, labour and the environment;
- satisfaction with their present condition;
- plans for the property.

3.3 *Information sharing and participatory planning*

After data from the questionnaire and from mobilization meetings are tabulated and analysed, a strategy should be pursued to share these data with the stakeholders in communities, according to a logic of successive involvement that could lead to referential and territorial planning, which identifies:

- situation analysis;
- prioritization;
- strategies and activities;
- goals and deadlines;
- sources of funds;
- framework of public policies;
- roles and responsibilities;
- process of monitoring, evaluation and reprogramming.

3.4 *Participatory implementation*

Considering the information coming from the debates in communities and territories and the establishment of a steering group for the territorial planning of productive diversification, stakeholders involved in this management process are responsible for promoting the consolidation of collaborative networks and partnerships with social subjects and public officials to provide the requisites for setting up a dynamic.

All stakeholders at community level and public officials shall participate in the implementation and management of alternative livelihoods in an open, transparent and participatory manner. The participation shall be facilitated by all relevant information, inputs and incentives.

Sensitization and training of social workers and farmers are the conductors of the process, which, given the active social participation, should move towards the government for allocation of public policies to support productive activities prioritized in discussions with the communities.

3.5 *Continuous monitoring, analysis, evaluation and initiation of a new cycle of actions*

The territorial process of productive diversification in tobacco growing regions should include the establishment of a steering group to coordinate and monitor the implementation of activities. This monitoring should be done in a coordinated way among all stakeholders and communities involved, providing instruments to collect data for evaluation and especially ensuring the hierarchy of community meetings to review results and re-programme actions. Thus, prioritization of social participation, and

community ownership and transparency of information, can encourage dynamic sustainability of livelihoods diversification in a sustainable manner.