cultural Ministry), and the tobacco industry. Their positions range from an enthusiastic acceptance (EU Commission, anti-tobacco lobbyists), through an acceptance with caveats (Polish citizens, Polish media, Polish Health Ministry), a rejection with caveats (Polish Agriculture Ministry), to a complete rejection (pro-tobacco lobby, tobacco industry).

**Conclusion:** The findings will help to appraise the strengths of the anti- and pro-tobacco camps in Poland, assess the level of collusion between the Polish government and the tobacco lobby, and to evaluate the extent to which the proposed ban would constitute a step towards the tobacco endgame in Europe. Given the interest tobacco companies demonstrated in using FAsCS to entice women to smoke, they will be also of relevance to Asian countries with presently low female smoking rates.

**POSTER PRESENTATIONS**

**Making the case to Finance Ministers (the economics of tobacco control)**

**PP025**  
**TOBACCO EXCISE POLICY IN INDONESIA: BRINGING THE HEALTH OBJECTIVES BACK IN**  
Abdillah Ahsan, Demographic Institute, Faculty of Economics, University of Indonesia, Indonesia

**Background:** Smoking prevalence in Indonesia is increasing recently. Smoking prevalence among adults in Indonesia jumped from 27% in 1995 to 34.7% in 2010. For the same period the smoking prevalence for men increased from 53% to 66% while for women increased from 1.7% to 4.2%. Tobacco tax is considered the most effective instrument to control its consumption.

**Objective:** To describe tobacco excise tax system in Indonesia and to assess the effectiveness of tobacco excise policy in term of tobacco control.

**Method:** Policy analysis of the ministry of finance regulation about the tobacco excise tariff in 2009–2012.

**Result:** According to law No. 39 year 2007 about excise the objectives of excise tax are to be the most effective instrument to control its consumption. This law also stated that the maximum excise tariff is 57% of the retail price which is lower than recommended by WHO, 2/3 (67%) of retail price. During the 2009–2012 period, average tobacco excise tariff has increased from 38% in 2009 to be 54% in 2012. The tiers of excise tariffs also reduced from 25 tiers in 2009 to 20 tiers in 2012. Tobacco excise tax has failed to increase the cheapest price of cigarette from 2008 to 2012. Tobacco excise system in Indonesia is complicated that create wide gap between the cheapest and the most expensive price cigarette.

**Conclusion:** Tobacco excise in Indonesia must be increased substantially to control its consumption. In addition, tobacco excise system in Indonesia must be simplified to maximize the health benefit of increasing tobacco excise.

**Alternative livelihoods for tobacco farmers and retailers**

**PP017**  
**AGRO-ECOTOURISM: AN UNDEREXPLORED DEVELOPMENT ALTERNATIVE FOR TOBACCO FARMERS IN BOLIVIA**  
Jorge Dennis Rada Noriega1, Marty Otanez2, Gina La Hera Fuentes3,1, Inter American Heart Foundation, Bolivia; 2University of Colorado, United States; 3Instituto Nacional de Salud Publica de Mexico

**Background:** Mañaire Valley in Santa Cruz, Bolivia, produces 14 of the 20 main country’s food agricultural products and is the country’s dominant tobacco growing area. Tobacco farm families suffer green tobacco sickness, child labor exploitation and their quality of life is threatened by weed-burning for field preparation, tobacco-related deforestation, soil desertification and agro-chemical poisoning. In the quest to increase food sovereignty and reduce reliance on tobacco growing, agro-ecotourism represents a potential remedy. Amboro’s National Park and Samaipata ruins are local natural touristic attractions. Organic/ecological farming is an emerging tourist attraction and an economically viable alternative for tobacco farming. Researchers and advocates focused on alternative livelihoods for tobacco farmers are beginning to explore agro-ecotourism as a solution to tobacco-related poverty and debt. This presentation urges greater attention to healthy child, family development and sustainable employment opportunities with low environmental impact.

**Objective:** To analyze and compare costs and profits of agro-ecotourism and tobacco farming

To assess organic-ecological agriculture as an alternative livelihood for tobacco farmers and to estimate

To promote sustainable agriculture and tourism with low environmental impact

**Method:** Case study comparing economic and ethnographic data of farmer’s households and bibliographic review

**Result:** 700 families farm tobacco in Mañaire, with average family of 5 members. In most cases farmers with little or no access to capital or nongovernmental support for farming are driven to cultivate tobacco. Tobacco farming annual cost is US$ 4,800 per 2 hectares. In the best-case scenario, annual profits reach US$ 800 but farmers could end up with a US$ 1,800 debt or more due to tobacco industry price degradation and income eroding arrangements in favor of land owners. This debt increases with industry’s annual loans of US$ 870, a common practice.

In contrast, with an investment of US$ 6,000 for land and infrastructure for agro-ecotourism, a farm family could reach net profits between US$1,800 and 3600 per year per 2 hectares, at the first year of implementation, with monthly salary between US$380 and 530.

**Conclusion:** Ecological/organic crops of a variety of vegetables and fruits are sources of healthy jobs and food for farm families, giving significant profitability at short and long term, providing options to exit tobacco farming improving income and life quality.

**PP043**  
**HEALTH AND LIVELIHOOD PARADOX: UNDERSTANDING LIVELIHOOD AND POVERTY SITUATION OF TOBACCO WORKERS**  
Sant Kumar Rout, Ravi Kumar Balu, Sakhthivel Selvaraj, Public Health Foundation of India, India

**Background:** The structure of employment in tobacco industry is mainly informal in nature. Faced with several constraints, workers engaged in bidi industry and off farm activities, are in extremely vulnerable conditions due to subsistence income and inadequate social security measures. While tobacco control assumes significance, providing alternative livelihood to the workers becomes a major concern. Exploring existing alternative livelihood sources requires an understanding of the income, poverty and employment situation of the workers. The perception of the workers on health and poverty dynamics is critical.

**Objective:** 1) Examine the socio-economic status of the tobacco workers in bidi rolling and off-farm activities – curing and grading. 2) Assess the extent of employment and income earned in the manufacturing of beedis and off farm activities. 3) Identify the potential employment opportunities for the workers based upon their perceptions and preferences for alternative employment

**Method:** This study is based on primary survey done among the household involved in beedi rolling, grading and curing activities in Karimnagar and Prakasam districts of Andhra Pradesh. The two districts were selected due to relatively higher occurrence of tobacco related activities. Around 1260 bidi rolling households and 1288 worker households engaged in off farm activities were randomly selected from the urban and rural areas. Focus group discussions and key informant interviews were conducted to examine their perception.

**Result:** More than 70 percent of the bidi rolling households belonged to the backward castes, while the scheduled castes had a major share in the grading and curing activities. The bidi rolling households generate 26 percent of their annual income from bidi manufacturing and 41 percent of the annual working days of the family is derived from it. The grading households generate 24 percent and curing households generate 36 percent of their annual income from these activities. One fourth of the bidi rolling households are estimated to be staying below the poverty line and this is as high as 24 percent among the curing workers. Workers in the curing and grading activities complain of nausea, headache and skin problem. Most of them discourage their children to participate in such activities.

**Conclusion:** Sustained initiatives from the government and other actors could help workers shift to alternative vocations as majority of them are willing to shift due to persistent poverty and lack of social security.

**PP046**  
**TOBACCO TO NON-TOBACCO: DETERMINANTS AFFECTING THE CROPPING TRANSITION**  
Nayan Chakravarty, Public Health Foundation of India (IIPH Bhubaneswar), India

**Background:** The tobacco industry frequently argues that tobacco is a significant source of employment and livelihood. Economies, particularly of low-income households, will suffer greatly if strong tobacco control legislation is passed. However, considering the ill effects of tobacco on human, there are multiple attempts in different dimensions both from its supply and demand side to reduce its production and consumption. One of the dimensions is to consider alternate sources of crop to tobacco or identifying alternate sources of livelihood for the farmers involved in tobacco farming.

**Objective:** The aim of the study was to identify multiple determinants which govern the decision of growing tobacco crop or shifting from tobacco to an alternate crop. The study considers the feasibility of the transition from tobacco farming to non-tobacco farming, undertaking different barriers and enablers to alternate farming of tobacco in India.

**Method:** The data of the study has been collected through a systematic literature search of database; Agris, Econlit, IBSS, Pubmed, web of Science; using keywords like “tobacco farming”, “tobacco and alternate farming”, “tobacco crop”, “tobacco cultivation” and “tobacco farming”. Due to the paucity of data available, the study has considered both peer reviewed and non-peer reviewed literature from both published as well as grey literature.

**Result:** The tobacco cultivation trend in India shows that tobacco has replaced other backward castes, while the scheduled castes had a major share in the farming annual cost is US$ 4,800 per 2 hectares. In the best-case scenario, annual profits reach US$ 800 but farmers could end up with a US$ 1,800 debt or more due to tobacco farming under fiber, coarse grains along with some cereals crops production and reversing the trend from tobacco to non-tobacco crops, would be highly complex and not a linear processes. The literature review suggests that the extent of irrigation, availability of labor, input subsidy related to fertilizer, tobacco
import and export value, government policies and sex ratio as some of the determinants affecting tobacco cultivation.

Conclusion: Switching over from tobacco farming to an alternate crop, an alternate model needs to be in place. Alternate crop that is viable and profitable at some regions may be the same in other agro climatic zones. Phasing out tobacco crops through extreme regulation before viable alternatives have been identified, would not be a sustainable approach.

The MDGs, NCDs, tobacco control and sustainable development beyond 2015

Objective: To foster increased tobacco-control and NCDs education, with grassroots training, in health curricula.

Method: Sessions to highlight deficiencies in advocacy training and emphasize on the need for medical and health education reform to introduce robust advocacy skills and grassroots training for tobacco control, and NCDs control.

Results: Women use various types of SLT including misri (27.1%), pan with tobacco (48.2%), gutka (18.6%), tobacco (loose and packets) (27.1%) and gud (26.4%). Out of these users 36.2% reported using two or more types of SLT. Approximately half of those who have noticed the scorpion symbol on the tobacco packets associate it with cancer. Women recognize certain risks associated with use of SLT on the developing fetus, but continue using these products including during pregnancy as they perceive benefits associated with its use. Data collected through repeat visits from 76 gutkha users in the survey showed that the ban has reduced the use of gutkha but half of the users actually increased their consumption of other types of SLT products. Nearly two-fifth of women reported seeing advertisements in television on the benefits of quitting tobacco but did not report other sources of anti-tobacco promotion. Despite pressures to quit and efforts to quit, women have not been successful in doing so.

Conclusion: The ubiquitous presence of SLT products in the community, cultural norms and practices that support the use, influence women to use these products. Focusing television campaign messages on adverse reproductive health implications of SLT use and encouraging service providers to convince women to quit might have an impact since women are concerned about the health of their babies and sensitive to social pressures.

Innovation in tobacco control strategies and interventions

Objective: To study and evaluate the impact of interventions involving women SLT users aged 18-24 years in two slums of Lucknow city. Case-control design was adopted to study multiple factors and single outcome (tobacco use). Category matching for cases and controls for age, sex and slum was done, case: control ratio of 1:1 maintained. Chi-squared test was performed to examine association between tobacco use and selected background variables. Conditional Logistic regression was performed to find net effect of independent variable on tobacco use.

Result: Tobacco use by family, at school/work was significantly associated with its use among youth. Likelihood of its use increased on “seeing tobacco shop near home” (OR=7.9) than other places and “use of non-tobacco products” (OR=15.3). “Inability of family income to meet requirements” (OR=6,3) significantly influences its use. Awareness on health consequences and tobacco laws was significantly associated with its use. Likelihood of its use increased with the perceived benefits helps cure tooth problems (OR=2.8), helps handle stress better (OR=6,9), makes one look cool/knowledgeable (OR=2,6).

Conclusion: Youth in slums is influenced by tobacco exposure in places where they spend a lot of time like home, school/workplace rather than places like market. Strategies for warnings and creating negative image of tobacco need to be continuously implemented in these places for greater influence. Psychological condition among youth is associated with tobacco use and relation between them needs to be studied. Strategies to purge perceived benefits of tobacco use should be a high priority. Mechanisms underpinning, how use of non-tobacco products at early age is associated with tobacco use, need to be explored.