

Research Paper: Assessment of the Execution of a Tobacco-Free Village with a social development and sustainable rural health approach (Case Study: Damagh Sefid Village in Sarpol-e Zahab, Iran)

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ABSTRACT

Purpose: Rural communities often face the challenge of high rates of tobacco use, with both cigarette smoking and hookah consumption being particularly prevalent. Therefore, it is critical to manage and implement measures that effectively eliminate tobacco consumption in these settings. Several villages have implemented measures and achieved zero tobacco use, thereby earning recognition as “tobacco-free villages”. Damagh Sefid, located in Sarpol-e Zahab, is one such example. Accordingly, the present study seeks to analyze the process and factors influencing the implementation of the tobacco-free initiative in Damagh Sefid.

Methods: This study is an interpretivist approach using a Grounded Theory method. A total of 30 individuals participated, and thus, the sample size was determined through (situational) sampling until data saturation was reached, employing snowball sampling techniques.

Results: The results reveal the significant roles of non-governmental organizations and private institutions, alongside influential village figures, such as health officers, clerics, and elders. Visual campaigns, including banners and public lectures, along with active engagement from local broadcast media, particularly the Islamic Republic of Iran Broadcasting (IRIB), successfully raised awareness and motivated residents. Academically educated youth, particularly university students residing in the area, played a crucial role in encouraging smoking cessation, while schoolchildren served as effective health ambassadors. Furthermore, the schoolchildren served as prominent health ambassadors. Key obstacles include the village’s geographic isolation, visitors disregarding the smoking ban, and decreased shopkeeper earnings due to the cessation of cigarette sales.

Conclusion: The involvement of governmental and non-governmental organizations has facilitated the adoption of effective policies to combat tobacco use. Furthermore, the selection of the village as a tobacco-free zone has served as a powerful incentive for maintaining anti-tobacco efforts. However, there are several challenges. Notably, the lack of recreational and tourism places alongside educational classes to spend their free time. Employment opportunities remain scarce, and tourists sometimes undermine tobacco control efforts. Moreover, persistent unemployment, especially seasonal unemployment, remains a critical challenge despite broad collaboration.

Keywords:

Tobacco-free village, Smoking cessation, Non-governmental organizations (NGOs), Incentives, Damagh Sefid village

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1. Introduction

A healthy human is the foundation of sustainable development. Human-centered development approaches, which emphasize health as a fundamental value, assert that without health, individuals, families, communities, and entire nations will be unable to achieve their social and economic goals (Fathi et al., 2012: 2). The importance of the social dimension of development and the emphasis of the World Health Organization (WHO) on social health, alongside physical health, have led to a growing concern among sociologists and social planners regarding the social well-being in any society.

Nowadays, health is considered a top priority by policymakers. In this regard, the equitable distribution of health services is among their major concerns. Insufficient attention to villagers' health compared to urban residents has led to widespread inequalities. Health inequality refers to differences in health state or distribution of its social determinants among different social groups. When such inequalities are avoidable and unfair, they are called health injustice. These injustice among different populations emerges from intricate interactions between biological elements, lifestyles, environment, and socioeconomic factors, which are known as the social determinants of health. In other words, social determinants, either independently or through their mutual influence, profoundly affect health status and can cause injustice in socioeconomic and health outcomes. Consequently, understanding this injustice has been taken into serious consideration as improving health in unhealthy communities is more difficult than helping ill individuals in healthy communities (Douthit & Biswas, 2018: 114).

Despite the existing research, the issue of health in villages remains understudied. Iran's rural health program has been a cost-effective and effective way to promote health across villages of Iran, particularly to reduce maternal and infant mortality. Globally, various models for controlling tobacco use, as well as smoke-free cities and villages. In 2001, Saudi Arabia earned the "Smoke-Free City" award for the holy cities of Mecca and Medina. By enforcing restrictions on tobacco imports, limiting availability, banning smoking in public places, and enhancing public awareness about the dangers of smoking, the country significantly reduced tobacco consumption. Religion played a key role in this achievement as the initial step involved implementing regulations prohibiting smoking in public areas. In a World Health Organization study during the early years of enforcing these

laws, New York, New Zealand, Ireland, California, and Uruguay were successful cases of public compliance, with Ireland showing the highest acceptance rate. Saudi Arabia, by emphasizing the inappropriateness of smoking in its two sacred cities, was essentially able to control tobacco use by citizens and pilgrims.

Australia is another country known for its strict anti-smoking regulations. Cigarette packs in Australia feature prominent graphic warnings, and brand names appear only in small text. Any visual design that might enhance the appeal of cigarette packaging is prohibited. Additionally, cigarettes are heavily taxed. Other effective measures include culture-building via media and the schools. Several efforts have been made in this regard, such as holding the "For a Tobacco-Free Life" campaign by the European Union in 2005 and the UK government's £31 million anti-smoking campaign (Aghajanian et al., 2007: 1470).

The tobacco-free city and village initiative based on Article 8 of the WHO Framework Convention on Tobacco Control was introduced in the holy city of Qom in 2019 as a pilot program to protect people from exposure to secondhand smoke and reduce its harmful effects. Preparations have been made to implement this program across 63 medical universities in Iran since August. This five-year program will continue until 2025, by which time 63 cities and 63 villages of Iran are expected to become tobacco-free. The program may be extended to additional cities and villages. A tobacco-free city or village is one in which the sale, supply, and use of tobacco products are regulated in a way that protects residents from secondhand smoke, limits direct and indirect advertising and promotional strategies, and encourages tobacco users to quit. By focusing on supply and demand reduction strategies, it is expected to steadily reduce tobacco consumption in these areas (Valizadeh, 2020: 2).

A closer look at the income-expenditure report for urban and rural households in 2021 shows that rural families spent more money on tobacco compared to those in urban areas. Hookah consumption was also higher in rural areas than in cities (Statistical Centre of Iran, 2021: 2). In 2022, according to a 40% increase in tobacco prices, each rural household spent about 697,500 tomans on tobacco, while each urban household spent 653,240 tomans. It is worth noting that the figures provided by the Statistical Centre of Iran are not adjusted for inflation and do not indicate the number of users or the actual volume consumed, and they only reflect expenditures. The higher tobacco costs in rural areas might be attributed to greater inflation for these products in villages. For ex-

ample, in February 2022, the point-to-point and annual inflation rates for tobacco were 38.5% and 41.5%, respectively, in rural areas, but the figures were 31.9% and 39.9% in urban areas. When examining cigarette consumption by income decile, the data reveal that in 2022, rural households in the first decile spent an average of 199,500 tomans annually on tobacco. For the second and third deciles, the figures were 395,000 and 630,000 tomans, respectively. However, urban households spent even more in lower deciles as the figures were 483,000, 529,000, and 682,000 tomans for the first three deciles. For deciles four to six, rural households spent 685,000, 759,000, and 703,000 tomans per year on tobacco, compared to 617,000, 654,000, and 583,000 tomans spent by their urban households. In the seventh to tenth deciles, tobacco expenditures in rural areas were 771,000, 839,000, 894,000, and 1,100,000 tomans, respectively, while these figures were 614,000, 607,000, 733,000, and 1,029,000 tomans, respectively, in urban households (National Tobacco Control Secretariat, 2023: 2).

Damagh Sefid village, located in Sarpol-e Zahab County, has been introduced as a model tobacco-free zone and pilot site without tobacco or hookah consumption. In this regard, training NGOs have played a crucial role in tobacco non-consumption, using the experience of people and their predecessors who passed down a tobacco-free lifestyle, a right belonging to everyone. Therefore, this village has the potential to serve as a role model for other rural communities across Kermanshah Province, offering a practical example of how reducing tobacco use can lead to a healthier life. On this basis, the present research aims to investigate the strategies for promoting and disseminating a smoke-free lifestyle among villagers in Damagh Sefid, the tobacco-free village in Sarpol-e Zahab.

2. Literature Review

Health, as defined in the Constitution of the World Health Organization, is a state of full physical, mental, and social well-being, and not merely the absence of disease or disability. It also an abstract mental notion that can lead to confusion and debates among health scholars and professionals. At first glance, the term “right to health” may seem abstract and unfamiliar to the general population and specialists, as it is sometimes misinterpreted as a right to be healthy, or even as a claim to every element necessary for achieving complete well-being (Toebes, 2001: 181).

Therefore, health is not merely the absence of illness, but encompasses a state of physical, psychological, and

social well-being. Furthermore, the right to health, as recognized in international, regional, and domestic documents, refers to the right to have health facilities, services, and resources, and has a right-claim nature. Even though the highest attainable level of health depends on various conditions, such as socioeconomic, cultural, and political infrastructures, as well as financial and human resources, it remains a legitimate human right that individuals claim from the state. Achieving this right in its full scope often encounters numerous theoretical and practical limitations.

Tobacco products are now considered a global public health concern because their consumption- mainly in the form of cigarettes and hookah- significantly contributes to disease, disability, and premature death (Momenabadi et al., 2016: 127). According to WHO statistics, one billion people around the world smoke, burning through approximately 60 trillion cigarettes (Rezakhani Moghadam et al., 2013: 105). In developed countries, such as those in Europe, around 40% of men and 20% of women are smokers. In South Asia, about 35% of men and nearly 5% of women smoke. In African countries, 13% of men and 3% of women smoke (Yousefi et al., 2014: 827). In Iran, almost one-fourth of the population between the ages of 15 and 64 uses tobacco, and the upward trend in smoking among women and adolescents is alarming (Sharif et al., 2014: 21). Studies indicate that tobacco use among teenagers and youth is rising, while the average age of initiation is dropping both in developed and developing countries (Madani et al., 2016: 41). A majority of adult smokers begin smoking before the age of 18, during their adolescence (Azagba & Sharaf, 2011: 176). Early initiation of smoking significantly increases the likelihood of continued consumption into adulthood (Rezakhani Moghaddam, 2013:101).

Equitable and fair access is the most crucial aspect of healthcare. Equal access to health services is recognized as a fundamental human right (Amerion et al., 2010: 35). In essence, the health status of a population and access to medical and healthcare services are vital factors in social and economic development. Access is a complex, multidimensional concept, encompassing the provision of services and affordability (the capacity to offer assistance, adaptation, and conveniences), as well as availability and accessibility (Dickman et al., 2017: 2100). Geography plays a critical role in this regard. In large countries with a vast dispersion of small towns and villages, access to healthcare often faces challenges and obstacles. Therefore, villagers often face significant accessibility barriers. In this regard, not only the limited quality of services available in rural areas, but also the

distance from health centers creates extra burdens like missed work, travel expenses, and lodging. These costs contribute to inequality between rural and urban areas, as well as within rural populations (particularly between those who own private vehicles and those who do not).

Nine factors shape health status: living in poverty, long-term unemployment, job loss, inadequate public transportation, stress, sense of deprivation, lack of social support, drug abuse, and lack of healthcare services. On the other hand, educational achievement and upper socioeconomic status are some social factors associated with better health and a healthier lifestyle. Conversely, poor socioeconomic conditions, including poverty, lack of medical access, unsafe physical environments, and material deprivation, negatively affect health (Laurie & Christine, 2015: 345).

It is essential to pay attention to human resources in rural communities, especially rural women, who make up a significant portion of the village population. Women in rural areas endure a distinct kind of discrimination and deprivation, as they often engage in economic activities that do not generate direct income. As a result, their socioeconomic status is lower, and their access to and ownership of resources are limited (Kaur et al., 2005). Research suggests that a low socioeconomic status negatively influences all dimensions of health, as living under such conditions seems to impair individuals' self-perception to promote their health status (Keyes, 1998: 3). In many regions of the world, women are generally more deprived and vulnerable than men, and vulnerability is even more prevalent in rural areas. Despite women's involvement in numerous village-level activities, they are rarely granted high social ranks. Among the personal characteristics of rural women that may contribute to their social isolation are low self-esteem and limited social skills, which often hinder the establishment of stable relationships with others.

There are various paradigms for health as follows:

A. Biomedical Paradigm: In a biomedical paradigm, health is traditionally defined as the absence of disease. According to this view, individuals are considered healthy as long as they do not suffer from illnesses. This concept formed the foundation of the "germ theory of disease", which influenced medical science at the beginning of the 20th century (Scamber, 2017: 37).

B. Ecological Paradigm: This paradigm addresses two aspects, human and environmental imperfection, and has proven that improving the compatibility between indi-

viduals and their natural environment can significantly increase life expectancy and enhance quality of life, even in the absence of modern health services (Shojaei Tehrani & Ebadi Fard, 2017: 167).

C. Psychological Paradigm: Advances in social sciences in the contemporary era have shown that health is not only a biomedical phenomenon, but it can also be affected by psychological factors.

D. Holistic Paradigm: The holistic model, which is a combination of all concepts, seeks to detect the impact of medical, environmental, social, economic, cultural, and political factors on health (Scamber, 2017: 37).

Several studies conducted in this field are as follows:

In a paper titled "An Investigation of Tobacco Use among Adolescents in Bushehr and Related Factors in 2019", Aref et al. (2021) concluded that smoking with peers who use tobacco, or being exposed to smoking within the family or close relatives, increased the likelihood of tobacco use among adolescents. The study recommends that families not only avoid using tobacco themselves, particularly in the presence of children, but also be aware of their adolescents' social circles and friendships to prevent them from being influenced by peers who may encourage smoking.

In a study titled "The Status of Tobacco Use in Urban and Rural Populations Aged 46-51 in Hormozgan", Ahmadi-zadeh Fini et al. (2019), reported that hookah use among women in rural areas was twice as high as that among men.

Rostami et al. (2018), in their paper "Economic Inequality in Cigarette Use in Rural Areas of Hamadan, Using a Concentration Index Approach", found that there were significant socioeconomic inequalities in smoking in the studied region, and the prevalence of smoking was higher among men. There is thus the necessity of conducting educational interventions, anti-poverty programs, and further research in this field.

In the research titled "Epidemiology of Tobacco Use and Its Association with Some Demographic Factors in a Rural Region of Kerman", Ziaoddini and Ziaoddini (2006) found that cigarette use and addiction were significantly high, especially among men. They recommended that, due to the friends' roles and great willingness to quit, responsible organizations should implement education programs about social skills, while provid-

ing adequate support services for those wishing to quit smoking.

In a study titled “Cigarette Consumption Patterns in a Rural Area of Iran”, Ali Pasha et al. (2004) believed that the daily cigarette consumption rate was approximately 28.2% (with the sex-standardized rate at 17.15%). The average age of smoking initiation among smokers was 21.4 years, and over 80% of respondents reported starting before age 25. On average, smokers used 16.8 cigarettes per day. Therefore, female gender ($p < 0.000$), higher educational level ($p = 0.023$), and older age ($p = 0.041$) were among the protective factors against smoking.

In an article titled “Pathological Analysis of Tobacco Use in Rural Communities (A Case Study in Kermanshah, Western Iran)”, Azmi and Masjedi (2023) argued that misconceptions about the absence of tobacco in villages, distrust in medicine, and limited access to education pose major challenges to tobacco control programs in rural areas. Moreover, governmental neglect and insufficient investment by public institutions contributed to smoking prevalence.

Sedaghat et al. (2023) concluded that long-term macro-level socioeconomic indicators significantly affect drug-related mortality in Iran, highlighting the issue as a serious social concern. Specifically, drug-related death rates increased with rises in Gross Domestic Product (GDP) and literacy rates, while decreasing as urbanization and unemployment rates grew.

3. Methodology

This study employed a qualitative research approach. Initially, the conceptual model was developed and illustrated using qualitative research methods. The research was based on the interpretivist paradigm. Interpretivism is a research philosophy that posits reality as subjective and socially constructed. It holds that social phenomena are deeply interconnected, making it difficult to separate or isolate distinct aspects of reality. This paradigm aims to free the social sciences from the limitations imposed by the positivist framework. Interpretivists contend that reality is complex and can not be reduced or explained through empirical methods. Furthermore, reality is not an objective entity, but a subjective construct shaped by social interactions. Positivism, pragmatism, and interpretivism are three foundational research paradigms. Interpretivism shares strong affinities with social constructivist philosophy. Interpretivist researchers argue that linear, positivist methodologies are inadequate for studying human-centered issues. Moreover, the process

of observing and analyzing social phenomena is largely interpretive and closely tied to the researcher’s perspective. Qualitative research methods, such as Husserl’s phenomenology, are based on the interpretivist paradigm. (Ebrahimpour & Najjari, 2007: 20).

The research method was qualitative, using the Grounded Theory approach. Grounded Theory is a prominent qualitative approach that allows researchers to derive theories directly from data. This method is used in social sciences, psychology, and education, offering deep insights into social and human phenomena. The study is applied in terms of purpose. Grounded Theory, a qualitative technique, focuses on clarifying social interactions, actions, and experiences through participants’ own perspectives. When first introduced, qualitative research using Grounded Theory was seen as a pioneering approach. Through an inductive process, data (such as interviews and observations, and in rare cases, historical data, archival documents, and other sources) can be analyzed during the data collection phase. This method departed from the dominant trend of the 1950s and 1960s, when research began with a theoretical framework requiring empirical confirmation. Instead, researchers initiated data collection first, allowing theory to emerge from analysis (Esmaeili et al., 2013: 290).

Grounded Theory is distinguished by the following characteristics:

1. Data-driven initiation: Researchers begin by examining a case, an individual, or a group. Through analysis of cases, researchers formulate an experimental definition of the concept. Then, an explanation is made based on this case analysis.

2. Participant-centered approach: Researchers observe participants in their everyday routines and interactions with others, conduct individual or group interviews, and inquire about their observations, daily routines, experiences, or relevant sources.

Data collection was conducted through in-depth, semi-structured interviews, which are common in qualitative social studies. This format balances fully structured and unstructured interviews. The interview protocol includes a set of predetermined questions; however, the researcher retained the flexibility to introduce additional questions as the study progresses. Although all participants are presented with the same core questions, they are free to articulate their responses in any form they prefer. In this method, the researcher must interpret, code, and classify the responses accordingly.

The sample size was determined through situational sampling (until data saturation), meaning no new information was emerging that could add to category development. Saturation serves as an indicator to stop data collection when further interviews no longer produce novel insights.

A total of 30 participants were involved. Inclusion criteria specified that participants must be household heads living in the village, aged 18 or above. Snowball sampling was employed- a non-probability sampling technique that relies on random selection of participants, especially useful when the members of a group or community are hard to identify. In this approach, the researcher first identifies certain individuals and, after collecting information from them, requests that they refer other people to participate. This technique is also applied to find experts in a particular area. The participants consist of:

- Indigenous people;
- Local authorities, including village heads, members of the Islamic Village Council, officials responsible for tobacco control in the province, and university professors and scholars related to the research topic.

The software used for analysis is Excel. Conducting peer reviews through triangulation, along with providing comprehensive descriptions of procedures and data within the research report, helps improve both the reliability and the internal and external validity of the results.

Using Excel in Grounded Theory analysis, the researcher systematically investigates the data in several stages. The Grounded Theory process can be outlined in four main steps:

- Detecting repeated themes or categories by thoroughly reviewing the data;
- Coding the identified themes with relevant keywords and phrases;
- Grouping and classifying themes in a hierarchical or tree-like structure to form concepts;
- Categorizing these concepts by identifying relationships among them;
- Ultimately, the classifications illuminated the connections between categories, resulting in the emergence of a newly developed theory.

4. Findings

The descriptive results from the study are shown in [Table 1](#):

Qualitative Analysis and Provision of a Paradigmatic Model Using Strauss and Corbin’s Grounded Theory:

By combining quantitative data, qualitative insights, and feedback from the Delphi method, a comprehensive paradigmatic framework was formulated. This model offers a structured way to analyze tobacco abstinence in Damagh Sefid village.

Open Coding

During the open coding phase, data were broken down into smaller parts, each tagged with a preliminary code. The goal was to identify distinct concepts within the data. Each code corresponds to a part of the data that describes a particular concept or phenomenon. The results are presented in [Table 2](#).

Table 1. Descriptive Data of the Study

Variable	Variable levels	Frequency	Percentage
Age	Less than 35 years	15	50%
	Between 35 and 50	5	16.66%
	More than 50 years	10	33.34%
Gender	Male	20	66.66%
	Female	10	33.34%
Education level	Illiterate	3	10%
	Below diploma	18	60%
	Diploma and higher	9	30%



Table 2. Open Coding Results

Description	Code	Frequency
Poor village access due to inadequate roads and geographical challenges led to tobacco prevalence in the past.	Challenge of Access	18
Absence of recreational amenities such as playgrounds, gyms, internet cafés, and game centers for locals	Need for leisure facilities	17
Enhanced advertising focusing on tobacco harms and risks among residents	Awareness and advertising	15
Tobacco-related income will be spent on job creation, making income from handicrafts and farming activities in the village.	Economic opportunities	13
Addressing environmental damage caused by leftover cigarette debris and minimizing harm to plant cover caused by the use of hookah charcoal ¹	Smoking pollution	11
Alleviating tourists' dissatisfaction regarding tobacco use in rural areas; Concerns about cultural and social shifts along with the proliferation of tobacco use; Local community's refusal to accept tobacco consumption	Social acceptance of the tobacco ban	13
Reducing concerns about the conduct and hostility of tobacco users. Threats by tobacco vendors and the adverse impact on social peace and public health due to tobacco consumption	Safety and peace	16



1. Unfortunately, one of the jobs for Kermanshah villagers is the production of oak charcoal, which, due to its high quality, has significant demand across Iran but this practice has led to the destruction of many province's oak forests.

This phase helped distinguish a variety of concepts. For example, the need for recreational infrastructure, advertising programs, and socio-cultural activities emerged as crucial elements in making villages tobacco-free. Additionally, while economic opportunities exist in villages to create job opportunities and promote the local economy, these potentials have not been fully used, primarily due to a lack of sufficient infrastructure and ineffective communication efforts.

Axial Coding

Axial coding is the stage in which initial codes are grouped into larger categories and clusters. The objective is to clarify the relationships among the identified codes and concepts. During this stage, codes are classified into main and related categories. The results are presented in Table 3.

Table 3. Axial Coding

Description	Code
Village access Reducing village isolation Expanding the village's connection with the surrounding environment	Access Challenges
Need for sports services, internet cafes, educational centers, and classes.	Need for Recreational Facilities
Social acceptance of the tobacco ban Efforts toward cultural change Need for education	Awareness and Advertising
Handicrafts Natural capacities of the region for handicrafts Ecotourism	Economic Opportunities
Reduction of natural resource degradation Reduction of environmental pollution, such as tobacco waste Environmental protection attention	Pollution from Tobacco Consumption
Social security Reducing concerns about tobacco sellers and consumers' behaviors Reducing negative cultural effects	Social Acceptance of Tobacco Ban



In general, identifying access challenges such as village accessibility and reducing village isolation is difficult. The category of recreational facilities indicates the importance of improving infrastructure for leisure activities. Advertising was recognized as a key factor in tobacco elimination. While the village possesses numerous natural attractions and capacities, effective advertising can increase success in tobacco control. The cultural and social acceptance plays an important role in reducing tobacco use. Cultural and social changes and awareness about the benefits of tobacco abstinence should be emphasized more through education at this stage.

Selective Coding

Selective coding is the phase where axial categories are refined into final and core categories. These core categories are considered key research axes and lead to the formation of the conceptual model. The results are summarized in Table 4.

In general, improving infrastructure, especially roads, health centers, and transportation networks, has led to decreased tobacco consumption. Furthermore, strengthening local and regional advertising can reduce tobacco use. Moreover, social and cultural acceptance of the tobacco ban by locals can facilitate efforts for tobacco control.

After selective coding, a conceptual model was designed using the categories extracted from the coding stages. The model includes five main components: central phenomenon, causal conditions, contextual conditions, intervening conditions, and consequences (Figure 1).

The main categories and themes related to the phenomenon are identified in open coding. During axial coding, these categories are systematically improved and connected to subcategories. Finally, the research paradigmatic model is developed through selective coding. A paradigmatic model consists of the following components:

- Causal conditions
- Contextual conditions
- Intervening conditions
- Strategies
- Consequences

The use of a paradigmatic model narrows the breadth of the research, allowing it to concentrate on one of the primary social processes or contextual conditions embedded within the data. The identification of a central variable in the study not only brings conceptual clarity and guides further data collection and analysis. The core category directs theoretical sampling by anchoring the research in a conceptually meaningful axis.

- Central Phenomenon:

Evaluation of the implementation of the Tobacco-Free Village initiative in Damagh Sefid village, Sarpol-e Zahab.

Table 4. Selective Coding

Description	Code
Need to improve roads Development of health centers Expansion of transportation networks	Access Challenges
Strengthening sports and recreational infrastructure Increasing investment in extracurricular classes for youth	Need for Recreational Facilities
Cultural and social changes Activities of NGOs Concerns about negative effects and movement towards less tobacco use	Awareness and Advertising
Handicrafts Development of ecotourism Local employment opportunities	Economic Opportunities
Reduction of natural resource degradation Reduction of environmental damage from waste Necessity of conservation	Pollution from Tobacco Consumption



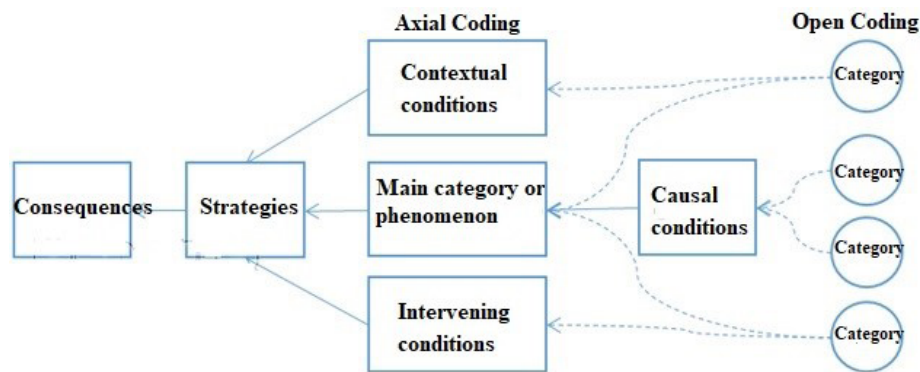


Figure 1. Grounded Theory Model. Reference: [Pars Online, 2025](#)



• Causal Conditions:

Economic conditions (private investment and financial support)

Physical conditions (weak infrastructure, poor roads, inadequate recreational facilities)

Socio-cultural conditions (local dissatisfaction with tobacco use by tourists, local awareness of tobacco harms)

Environmental conditions (natural resource degradation due to tobacco use)

• Contextual Conditions:

Public awareness (via media, school teachers, village elders, health house managers)

Presence of officials and expansion of anti-tobacco media coverage in the village

Intervening Conditions (Effective Factors):

Advertising and information dissemination, which play a crucial role in tobacco reduction, and the village's reputation as tobacco-free, creating strong motivation

Social restrictions among locals acting as a customary ban, effectively more successful than formal laws

Strict regulations prohibiting tobacco sales, making sales nearly impossible

NGO activities that engage the community, especially national and local NGOs

Education and empowerment of local communities, leading locals to gradually take over tobacco control management

• Interactional Conditions:

Local participation

Active participation of the local community in tobacco elimination

Positive interaction between locals, officials, NGOs, and elders by strengthening hospitality culture and mutual respect

Local and cultural skill training to promote tobacco abstinence and constructive interactions

Building networks among organizations and stakeholders

Inter-organizational cooperation (among government, private sector, and local communities) for investment attraction and infrastructure improvement

Creation of supportive committees for sharing knowledge, experience, and sources in regions

Participatory planning and management

Establishing local committees to enable joint decision-making on issues related to tobacco control

Consultation and transparency in decision-making to ensure that the needs of all stakeholders are taken into account

Supportive and empowerment systems

Holding workshops and training programs to empower local residents with skills relevant to tobacco control (such as handicrafts, ecotourism management, and lei-

sure-time activities aimed at replacing tobacco use with productive engagements)

Offering financial incentives and support packages to encourage health-oriented activities

Regulatory and monitoring systems

Monitoring the distribution and sale of tobacco products, particularly by local residents themselves, to prevent their harmful impacts

Designing and implementing clear yet flexible legal frameworks to combat the spread of addictive substances

Advertising and Information Dissemination

Facilitating effective communication between local communities and provincial health authorities

Designing public campaigns to highlight the harmful effects of tobacco consumption

• Consequences:

Positive

Job creation: Promoting leisure-time activities can lead to the development of new employment opportunities across various sectors such as handicrafts, agriculture, and tourism services. This, in turn, contributes to reduced tobacco consumption.

Strengthening the local economy: Through the sale of local products, handicrafts, and tourism activities, the local economy will be enhanced.

Preserving local culture and traditions that oppose the use of tobacco products.

Protecting and restoring the environment: When tobacco consumption is managed sustainably, it can contribute to the conservation of natural and environmental resources.

Negative: A decrease in income for local vendors, as they stated that cigarette sales generated high revenue while local products were not profitable.

Desirable social and cultural changes: Efforts focused on cultural transformation aimed at reducing tobacco use have had a significant effect on lowering consumption. Overall, this section of the study, utilizing interview data and Grounded Theory methodology, has explored the challenges, opportunities, and needs related to tobacco reduction in the village of Demagh Sefid. Through open, axial, and selective coding, the key categories associated with reducing tobacco consumption were identified, culminating in the development of a conceptual paradigm model. This model specifically addresses the central phenomenon of a tobacco-free village, along with the causal, contextual, and intervening conditions, as well as various outcomes resulting from tobacco elimination in the village. The conceptual model indicates that achieving a tobacco-free village requires focused attention on infrastructure, awareness-raising, social acceptance, economic opportunities, and environmental protection.

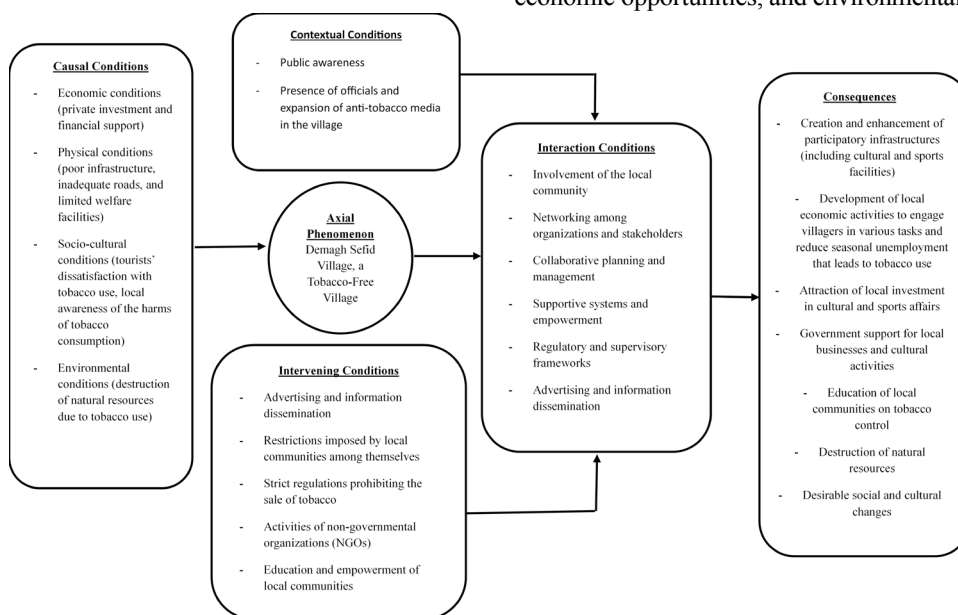


Figure 2. Causal Research Model

Based on the paradigm model above, the following operational strategies can also be proposed as a new component to be added to the paradigm model:

- Establishing and enhancing participatory infrastructures (including cultural and sports infrastructures)
- Developing diverse local economic activities to engage villagers in various tasks and reduce seasonal unemployment that leads to tobacco consumption
- Attracting local investment in the cultural and sports sectors
- Government support for local businesses and cultural activities
- Educating local communities on tobacco control efforts

5. Discussion

Damagh Sefid village, located in Kermanshah province, is a notable example of a successful tobacco-free village. Findings indicate that factors such as public participation, advertising, and community collaboration played a vital role. The strong presence of NGOs alongside public bodies facilitated the implementation of effective tobacco control policies. Local elders and community leaders were instrumental in promoting tobacco abstinence, and the official designation of the village as tobacco-free served as a powerful motivational factor. Nevertheless, challenges remain, such as limited recreational facilities, tourism opportunities, and educational programs to fill leisure time, as well as limited employment opportunities.

This study aligns with Aref et al. (2021), who found that tobacco consumption increased with the presence of friends or family members who smoked. Families are important role models and can influence tobacco use positively or negatively. Families that consume tobacco increase the likelihood of tobacco use among their children.

Consistent with research by Rostami et al. (2018), the present study confirms that educational interventions and poverty alleviation programs are effective in tobacco control. Education on tobacco includes two main components: raising awareness about its harms and teaching cessation methods. Awareness helps individuals understand tobacco risks and avoid initiation, while cessation

education assists current users in quitting and overcoming addiction.

Similar to Ziaeddini and Ziaeddini (2006), this study highlights that educating the community on social skills, on one hand, and providing accessible facilities and support for those willing to quit, on the other hand, are effective in tobacco control. These educational programs are typically offered in schools, universities, health centers, and through media channels. The primary goal of such education is to raise public awareness about the negative impacts of tobacco consumption on physical and mental health, as well as on economic and social well-being.

Consistent with a study by Azami and Masjedi (2023), this research underscores that governmental neglect and insufficient investment by public institutions play a significant role in tobacco control. To promote awareness and education about the harms of smoking, the capacities of virtual spaces and social networks should be utilized. Organizations, the public, and institutions can all contribute to tobacco reduction efforts by offering incentives for decreasing tobacco use. Additionally, educational programs and various classes organized by institutions have a substantial role in controlling tobacco consumption.

Furthermore, as noted by Sedaghat et al. (2023), macroeconomic and social indicators have a long-term impact on tobacco consumption. Tobacco use imposes a heavy economic burden on society, including high direct healthcare costs associated with tobacco-related diseases and indirect costs. Moreover, disability caused by tobacco-related illnesses and decreased productivity also result in significant negative consequences. Therefore, considering the detrimental effects of tobacco consumption on individual health and the high social costs, governments implement various policies to control its use. The scope of tobacco reduction plans is diverse, ranging from advertising campaigns and civil activities to the establishment of laws, regulations, pricing policies, and developmental strategies.

Based on these findings, the following recommendations are proposed for continuing and expanding the Tobacco-Free Village project to other areas:

- Limited sports, recreational, and leisure infrastructure remains a significant barrier. Since this is an international project, the government is obligated to provide special support for its success, as these villages will gain international recognition. It is essential that funding from

responsible organizations, such as the National Youth Organization, be allocated.

- Income loss among vendors due to the cessation of cigarette and tobacco product sales is a significant concern. To increase the income of villagers and sellers, measures should be taken such as diversifying products, offering cultural goods (e.g, books), and providing government assistance to these vendors. Additionally, provincial authorities could allocate loans through banks to create new income opportunities by investing in alternative businesses for these individuals.

- The project's success stems from collaboration between governmental and non-governmental organizations and NGOs. Therefore, maintaining these relationships is crucial for the project's success in other villages. The government can implement incentive policies, such as simplifying license renewals for active organizations or exempting taxes for organizations operating in these villages, as an encouraging policy.

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Conflict of Interest

The authors declared no conflicts of interest.

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