

# **NIRP Research for Policy Series 7**

The influence of settlement on substance use and abuse  
among nomadic populations in Israel and Kenya

**Ismael Abu-Saad and John Mburu**

## Colophon

### NIRP Research for Policy Series

#### **Part 7: The influence of settlement on substance use and abuse among nomadic populations in Israel and Kenya**

The Netherlands-Israel Development Research Programme (NIRP) was established jointly by the governments of the Netherlands and Israel in May 1992 and coordinated through DGIS (Ministry of Foreign Affairs, The Hague) and MASHAV (the Centre for International Cooperation, Ministry of Foreign Affairs, Jerusalem). The Netherlands Government was the principal sponsor of the Programme, through Nuffic (the Netherlands Organisation for International Cooperation in Higher Education), until January 2001. During the period 2001-2003, the ongoing projects will be piloted towards administrative and scientific completion. The organisation and administration of NIRP are the responsibilities of Nuffic (The Hague) and Haigud (the Society for Transfer of Technology, Jerusalem).

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# Preface

This book provides an overview of how settlement processes among nomadic and semi-nomadic populations can result in social and cultural disruption of traditional life. Based on a study among the Negev Bedouin Arab tribes in Israel and the Maasai tribes in Kenya, it focuses, in particular, on the influence of settlement processes on substance use and abuse.

The study was funded by the Netherlands-Israel Development Research Programme (NIRP), which has the objective of encouraging development-related research focused on socio-economic and cultural change. Because NIRP is policy-oriented in nature, its aim is further to make the results of this research accessible to anyone interested in solving similar problems, including policy makers, representatives of non-governmental and donor organisations, and the scientific community. With this in mind, the Publication Board has launched the NIRP Research for Policy Series as a channel for the publication of “user-friendly” summaries of more than 30 scientific reports.

The Publication Board wishes to thank the research team for the successful completion of this study, and Dr. Ineke Kroes for summarising the scientific report for use in this publication. Thanks are also due to Mr. Robert R. Symonds for revising the English.

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# I. General information

## I.1 Framework of the study

The experience from a number of developed and developing countries shows that settling traditionally nomadic and semi-nomadic populations tends to produce severe disruption of their social and cultural patterns. It may be associated with a wide range of social problems, including substance use<sup>1</sup>, crime and violence.

The Negev Bedouin Arabs and the Maasai are among the traditional organised nomadic or semi-nomadic tribes who are now living as minority groups in Israel and Kenya, respectively. These two nomadic communities have undergone the process of transformation from their traditional livelihood accompanied by a subsequent disruption of their original social, economic and community structures. This makes these communities vulnerable to becoming involved in substance use.

The Negev Bedouin are traditional nomadic or semi-nomadic tribes, who have inhabited the Negev desert since the 7<sup>th</sup> century AD. They remained in Israel after 1948 and are now a minority group of Israeli citizens. In the past, they used to live by raising sheep and practising seasonal agriculture (Shimoni, 1947).

The Maasai tribesmen were traditionally nomadic pastoralists who occupied a large part of Kenya. They kept large herds of cattle and camels and thrived well, establishing a delicate ecological balance between their herds and the natural resources. Disruption of their way of life started with the arrival of the British and Germans in East Africa during late 19<sup>th</sup> century.

The Bedouin and Maasai have a lot in common, as both of them share a nomadic or semi-nomadic origin and face a transition from their traditional livelihood to a new one. However, there are many differences between them in terms of the nature and intensity of the settlement process, their

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<sup>1</sup> In this report the term “substance use/abuse” is applied to any unfavourable use or consumption of nicotine (cigarette, tobacco), alcohol, soft drugs, narcotics and all kinds of hard drugs.

geographical distribution, proximity to other sectors of society, and their micro and macro-economic realities. Moreover, there are differences in the traditional patterns of substance use and between the traditional and current availability of substances.

This study primarily examines the status of substance use and its influence among two nomadic populations: the Negev Bedouin Arab tribes in Israel, and the Maasai tribe in the Kajiado District of Kenya. Until now, very little, if anything, has been done to assess the issue of substance use in these communities, or to develop drug abuse prevention programmes for them.

Given the many differences between the Bedouin and Maasai societies, the quantitative data analysis of the pattern and social context of substance use has been carried out separately for each population. This study identifies the social environment and the processes of socio-cultural breakdown in both societies, leading to the occurrence of high substance use.

In sum, this study investigates levels of substance use among Bedouin and Maasai tribes, its impact on their social life, people's perception of it, and their knowledge of, attitude towards and practices in relation to substance use and users.

## **1.2 Objectives and research questions**

This project was formulated as the first in-depth examination of issues of substance use and abuse among the Bedouin in Israel and Maasai in Kenya. Both communities are undergoing sedentarisation following government action directed towards their settlement. This settlement process has led to the total reorganisation of their domestic economy and the breakdown of their tribal social structure, thus changing the social, political and economic structure. The main objective of this study is to address this problem and to investigate the impact of these changes, particularly in relation to the phenomenon of substance use and abuse. This main objective can be specified into two general objectives:

1. To determine the levels of substance use among the Negev Bedouin Arab tribes in Israel and Maasai tribe in the Kajiado District of Kenya.
2. To examine the relationships between substance use and changes in dimensions of the social environment, such as social bonding, social learning, and knowledge, attitude and behaviour (KAB) among them.

The study further aims to provide baseline data for planning and policy making. In this regard, it aims to provide detailed information to assist the formulation of policies and practices for improving the settlement and living conditions of nomads and semi-nomads whose lifestyle is severely affected by substance use and abuse. From a theoretical perspective, the



research aims to provide information about the status of the nomadic and semi-nomadic population, the settlement process and shifting values and cultural norms.

These objectives have been translated and elaborated into the following research questions:

1. What are the levels of substance use among the Negev Bedouin tribes in Israel and the Maasai tribes in Kenya? Are there differences between the settled and unsettled communities in the types and quantities of substances used? How do the substance use patterns of the Bedouin differ from those of the Maasai?
2. What are the relationships between the social environment dimensions (*i.e.* radical social and cultural change, social disorganisation and inadequate socialisation) and substance use?
3. What are the relationships between the social bonding dimensions (*i.e.* family, peer and community relationships) and substance use?
4. What are the relationships between the social learning dimensions (observation, opportunity, social norms and reinforcement) and substance use?
5. What are the relationships between the KAB dimensions (knowledge, values, beliefs, attitudes, intentions, trial behaviour, stages of behaviour and established adult behaviour) and substance use?
6. What are the relationships between the demographic variables (sex, marital status, age, employment status, profession, education, etc.) and substance use?

### **1.3 Hypotheses and methodology**

It was hypothesised that the disruption caused by the settlement process among nomad and semi-nomad populations is associated with a wide range of social problems, including substance use. Settlement results in the reorganisation of the domestic economy and the breakdown of tribal social structures and cultural patterns, which make the recently settled nomadic and semi-nomadic population vulnerable to becoming involved in substance use and abuse. Moreover, the level of substance use has multi-faceted effects on the social environment, social bonding, social learning, knowledge, attitude and behaviour. It affects not only the settlement and living conditions of nomadic and semi-nomadic populations, but the whole society in which they live.

With respect to the Bedouin community in Israel, it was hypothesised that Bedouin girls and women live within a very tightly controlled social

structure, which disapproves of women using licit or illicit substances.<sup>2</sup> For this reason, it was speculated that females have less opportunity to observe and participate in substance-using activities. Thus, for the structured interviews, only male respondents were chosen for the Bedouin sample. This hypothesis is also based upon previous substance-use research conducted among Bedouin high-school students (of whom approximately 40% were female), which revealed that there was no licit or illicit substance use among females (Abu-Saad, 1996a). In the case of the Maasai community in Kenya, this hypothesis did not seem to be relevant, and so both males and females were included in the sample.

The research methodology consisted of a package that included a structured survey of a targeted population and subsequent qualitative and quantitative analyses. The details are as follows:

#### *Target population*

The study sample drawn for quantitative analysis consisted of 312 men living within and outside the government-planned Bedouin townships in Israel, and 345 people from the sedentary and non-sedentary Maasai communities in Kenya, giving a total of approximately 650 respondents. Purposive sampling was used to identify and include a broadly representative geographical distribution of respondents from settled and unsettled groups within each population.

In-depth interviews for the ethnographic component of the project were held with substance users living within and outside the official settlements, who were willing to provide information about their experiences of substance use and their views on the social context as substance users.

#### *Instrumentation*

For the collection of quantitative data, a structured questionnaire was developed for use in a household and an individual survey. Information was collected during the interviews on general demographic characteristics and on substance use. An additional set of questionnaires was prepared for the in-depth interviews in order to elicit the “life story” and social perspectives of the informants who were substance users.

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<sup>2</sup> Although there is no clear-cut distinction between licit and illicit substances, the buying and selling of licit substances (e.g. cigarette, tobacco) are not considered to be against the law. Illicit substances are the substances, the use, buying and selling of which are restricted by law.

### *Procedures*

The data for quantitative analysis were collected through structured individual household interviews. This method was perceived as the most appropriate and cost-effective, given the widely dispersed settlement and movement patterns of approximately half of the respective populations, the high levels of illiteracy among both the Bedouin and the Maasai, and the sensitivity of the issue. Experience with a previous survey among the Bedouin population in the Negev also indicated that this method was an effective one.

Several procedures were followed in order to protect the anonymity and confidentiality of the respondents. Neither names nor other personal codes were indicated on any interview record. All the respondents were assured of complete anonymity before they were interviewed, and they were told beforehand that participation in the study was voluntary.

In-depth interviews completed in both Kenya and Israel were transcribed, translated into English, and analysed.

### *Data analysis*

Descriptive statistics were used to report the basic distributional characteristics of the variables and Analysis of Variance (ANOVA) and the Chi-square test were performed in order to bring out differences between the groups.

## **I.4 Theoretical orientation**

This research deals primarily with the status, driving forces and effects of substance use among the Negev Bedouin Arab tribes in Israel and the Maasai tribe in the Kajiado District of Kenya. Numerous studies on the variables and their correlation of substance use and abuse reveal that there is a general agreement on the major predictors of substance use (*e.g.* Braucht *et al.*, 1973; Flay *et al.*, 1983; Flay and Petraitis, 1991; Hawkins *et al.*, 1986; Johnston *et al.*, 1982; Kandel, 1982; Murray and Perry, 1985; Ong and Isralowitz, 1996).

A number of relevant variables and variable domains have been identified from these studies and the theoretical aspect of the research is also anchored in them. The variables relating to substance use and abuse are grouped into four sets, which include the dimensions of social environment, social bonding, social learning, and knowledge, attitude and behaviour (KAB).

### *I.4.1 The social environment*

The social environment variable considers the structure of a society's economic, legal, social, cultural and educational systems as a determinant

of people's behaviour. In some studies, (e.g. Ong and Isralowitz, 1996) the social environment variable is established as a key one in relation to substance use. Social and/or cultural disorganisation and breakdown may lead to inadequate socialisation, which alters the social bonding and social learning variables (Merton, 1957). Wilson (1987) has found that this may, in turn, lead to increased substance use and abuse, especially among the disadvantaged. Research on Puerto Rican youth in the United States indicated that cultural attitudes toward substance use and abuse and loss of cultural identity play a major role in the substance-using and dealing behaviour of these youth (Rodríguez *et al.*, 1993). Similarly, American Indian youth who lose their cultural identity have been found to be more susceptible to substance use and abuse, compared with those who do not (Oetting, 1993). In their survey of substance use among Arabs in Israel, Jordan and the Palestinian Authority, Weiss *et al.* (1999) concluded that secularisation and exposure to the alcohol and drug consumption patterns of Israel and of Western culture in general – for instance, through the influence of television, tourists etc. – have resulted in surprisingly high levels of alcohol and other drug consumption among these populations.

#### 1.4.2 *Social bonding*

The social bonding variable considers how social organisation affects substance use. Conventional bonds with family, peers, school and other community groups are important factors, and researchers have shown that breakdown of family bonding increases the chances of bonding with delinquent peers (Elliott *et al.*, 1985). Brook found that conflicts and lack of affectionate mutual relationships between parents and children contributed to higher levels of drug use among African-American and Puerto Rican youths (Brook, 1993). Krohn and Thornberry (1993) studied the network systems of white non-hispanic, African-American and Puerto Rican youth. They found that the majority of those who do not use drugs have a stronger family network system than drug users. Conversely, drug users have more supportive and intimate relationships with their friends than non-users. Ong and Isralowitz (1996) found, from the studies of drug users in Singapore, that most drug users did poorly in school and dropped out prematurely.

#### 1.4.3 *Social learning*

The social learning variable is related to opportunities for observation and modelling of substance use behaviour, substance availability and social normative beliefs, including collective ignorance of norms, and social reinforcement. Researchers have developed relationships between these

variables from psychological and sociological perspectives (Bandura, 1986; Akers, 1977). Any particular behaviour is more likely to occur when it is differentially reinforced, and is seen as desirable. Hawkins *et al.* (1986) have also used the social learning variable to predict and explain criminal and delinquent behaviour, including substance use and abuse.

#### *I.4.4 Knowledge, attitude and behaviour change (KAB)*

A fourth set of variables, namely, knowledge and attitude and behaviour change (KAB), represent the intra-personal cognitive, affective and co-native type features. These include knowledge of physiological and social consequences of use, personal beliefs about consequences, general values and specific evaluations of the consequences, as well as attitudes towards substance use and related issues, behavioural intentions, trial behaviour, stages of behaviour (*i.e.* from licit to illicit substances) and established adult behaviour patterns.



## II. Results

### II.1 Description of geographical areas and population groups

#### II.1.1 *The Bedouin Arab population in the Negev*

The Bedouin Arab population in the Negev, who were traditionally nomadic or semi-nomadic tribes, suffered badly from the consequences of the 1948 War. It was estimated that the Bedouin Arab population in the Negev before 1948 ranged from 65,000 to 90,000 (Falah, 1989; Maddrell, 1990). In the aftermath of the 1948 War, the vast majority of the Negev Bedouin became refugees in the surrounding Arab countries and territories (*i.e.* the Gaza Strip, the West Bank, Jordan, etc.), and only about 11,000 remained in the Negev (Falah, 1989; Marx, 1967). The Israeli authorities took control of most of the land in the Negev and the Bedouin who remained in the Negev lost the freedom to cultivate their lands and to move around with their herds (Lustick, 1980; Bailey, 1995). Twelve of the nineteen tribes were removed from their lands and the whole population was confined to a specially designated restricted area (*siag*) in the north-eastern Negev, which represented only 10% of the original territory they controlled before 1948 (Falah, 1989; Lustick, 1980; Marx, 1967; Meir, 1990). Moreover, like all other Arabs in Israel, they were placed under Military Administration until 1966. This meant that they could not return and cultivate their original land, and that they were isolated from the rest of the Arab population in other parts of Israel. They needed special permits to leave the restricted area designated to them to look for jobs, education, markets, etc. (Marx, 1967). In the view of Bailey (1995) and Falah (1989), the restrictions imposed by the Israeli government represented a form of forced sedentarisation, which virtually ended their nomadic and semi-nomadic way of life.

The Military Administration over the Arabs in Israel was lifted in 1966, after which the Negev Bedouin came into greater contact with the broader Israeli society. The vast majority of the Bedouin became dependent on jobs in the Jewish sector, primarily as unskilled labourers, since they had lost their lands and traditional livelihoods (Abu-Saad, 1991a).

In the late 1960s and early 1970s, the government developed plans for the resettlement of the entire Negev Bedouin population into seven urban areas, namely Tel Sheva, Rahat, Arara, Ksifa, Segev Shalom, Hura and Laqia. The government rationale for establishing these towns was to “modernise the Bedouin” and to provide them with services more efficiently. The provision of services, such as running water, electricity, health clinics and modern schools, was used as an incentive to attract Bedouin to the towns. This urban settlement programme, however, has been controversial, given its radical departure from the Bedouin’s traditional way of life. In 1994, only 58% of the Negev Bedouin population of 88,300 lived in the planned towns, while 42% continued to live in spontaneous tribal settlements (Statistical Abstract of Israel, 1995).

**Box 1 Narratives related to the Bedouin of Negev**

“We should transform the Bedouins into an urban proletariat in industry, services, construction, and agriculture. 88% of the Israeli population are not farmers, let the Bedouins be like them. Indeed, this will be a radical move, which means that the Bedouin would not live on his land with his herds, but would become an urban person who comes home in the afternoon and puts his slippers on. His children would be accustomed to a father who wears trousers, does not carry a Shabaria [the traditional Bedouin knife] and does not search for vermin in public. The children would go to school with their hair properly combed. This would be a revolution, but it may be fixed within two generations. Without coercion but with governmental direction...this phenomenon of the Bedouins will disappear.” (Source: Moshe Dayan, Ha’Aretz interview, 13 July 1963).

“Two material practices are at the forefront of Israeli policies concerning the Negev: mass transfer of the Negev’s indigenous Bedouin population to planned townships and a corresponding registration of the Negev lands as state property....The Negev is conceived as vacuum domicilium an empty space that is yet to be redeemed, and the Bedouin, in turn, are conceived of as representing a defeated culture in its last stage of total disappearance from Israel’s historical scenery.” (Source: Ronen Shamir, *Law and Society Review*, 30(2): 232, 1996).

The lack of availability of jobs in the government settlements in Israel is a great problem. Since these settlements lack internal sources of employment other than municipal and public services, approximately 80% of the residents spend up to five days a week away from home in the centre of the country (Ben-David, 1991). The jobs available are often for semi- and unskilled workers (31%), while 54% perform unskilled labour (Table 1). 65% of the population in these settlements lives below the poverty line (Israel Broadcasting Association News Report, 1991).

Bedouin living outside the government planned settlements face a different set of problems. As they live in unplanned (*i.e.* illegal and unrecognised) settlements, they are deprived of services such as paved



Table 1 Occupations of Bedouin living inside and outside planned settlements (%)

Occupation	Inside planned settlement (n = 146)	Outside planned settlement (n = 155)
Unemployed	8	30
Unskilled labour	31	54
Skilled labour	13	12
Teaching	40	3
White-collar profession	8	1

roads, public transportation, electricity and, in many cases, they lack running water, sewage systems, waste disposal, telephone service, community health facilities, etc. These unrecognised Bedouin settlements are not geographically isolated, but are dispersed around and between the Jewish settlements, Bedouin towns and agricultural farms in the Negev. Bedouin in the unrecognised settlements are denied licences for building any sort of permanent structure. All forms of housing (except for tents) are considered illegal, and are subject to heavy fines and demolition proceedings (Maddrell, 1990). Despite these pressures, the Bedouin have remained on the lands which were traditionally owned by them and are now considered by the government as state lands. Also, the Bedouin have resisted confiscation of land and have tried to prevent their confiscation. Most Bedouin depend, at least in part, on traditional occupations of herding, agriculture and on the processing of animal products to supplement or to generate incomes, but they are restricted in these by the government. Herd sizes and grazing areas are very tightly controlled and a special police unit patrols and confiscates flocks which are considered to violate government regulations. Thus, very few Bedouin can subsist entirely on the traditional sources of livelihood, and so they must seek employment elsewhere in the Israeli economy.

The social structure of the Bedouin communities both within and outside the townships has also changed drastically. The traditional tribal structure, norms and values are no longer operative. The patriarchal family structure has been altered, since most of male adults are working outside the community and have little time to spend with their families. This cultural change has not been addressed, leaving many people lost between traditional and modern society. In the light of this disruption of traditional norms, values and social structures, the low socio-economic levels and the high unemployment rates, crime rates in the Bedouin townships are predictably increasing. Within the last generation, as the community has lost its

traditional way of life, the phenomenon of Bedouin drug consumption has also developed (Abu-Saad, 1991b).

For the Negev Bedouin, formal education is essential if they are to succeed in the new context. Their school dropout rate, however, is the highest in Israel. It is estimated that 70% of the Bedouin students drop out before completing secondary school (Abu-Saad, 1996b, 1997). In the traditional economy, children played a significant role in the agricultural and herding activities of the families. Bedouin youth in the government townships, however, no longer play this role. Because of the failure of schools to retain Bedouin students and the lack of positive structured activities for their development in the townships, children and youth have become part of a marginal, dependent population and are at risk of adopting delinquent attitudes and behaviours.

A study by Abu-Saad (1996a) among Bedouin intermediate and secondary school students within and outside planned settlements, revealed that 12% of the students in the planned towns and 15% of the students in the unplanned settlements reported that they smoked cigarettes. Eight percent from the planned settlements and 4% from spontaneous settlements reported that they drank alcohol. Eight percent of the students in the planned towns and 6% of those in unplanned settlements reported that they used illicit drugs. Although approximately 40% of the respondents were female, all the substance users were found to be male. Twenty percent of the illicit drug users in the planned towns and 10% of the illicit drug users in the unplanned towns reported that they used hard drugs such as cocaine and heroin.

### *II.1.2 The Maasai tribes in the Kajiado District of Kenya*

The Maasai tribes of Kenya were traditionally nomadic pastoralists occupying large parts of Kenya. All community members, including children, played important roles in the pastoral economy. This economy, in turn, formed the basis of their social structure. Traditional social relations were characterised by strong cooperation and high dependency between households, clans, age sets and sub-tribes. Reciprocity formed a powerful bond of solidarity between these many groups (Chege, 1983). At the end of the 19<sup>th</sup> century, before the arrival of the British and the Germans in East Africa, the Maasai pastoralists had occupied 116,000 to 207,000 km<sup>2</sup> area of land, from which approximately 44,000 to 100,000 km<sup>2</sup> was located in present-day Kenya.

In the early 1900s, the indigenous political superstructure was replaced by a colonial state. After the arrival of the British, the Maasai were removed from their best grazing lands. Their living area was restricted to two separated Maasai reserves totalling about 23,620 km<sup>2</sup>, to be regrouped at a

later stage into one enlarged reserve of approximately 37,800 km<sup>2</sup>. Additional minor adjustments resulted in a Maasai territory of 39,300 km<sup>2</sup> by 1934. However, the quality of their territory was severely reduced by the exchange of green pastures in ecologically favourable areas to the areas lacking sufficient water and year-round pasture (Rutten, 1992). As a result, the territory of the Maasai in Kenya was reduced to almost half of its former size during this century, while the Maasai and non-Maasai population occupying it had increased from 43,000 in 1915 to an estimated 262,585 in 1989 (Rutten, 1992). The census of 1979 revealed that the total population of the Kajiado District amounted to 149,005, of whom 63% were Maasai (Kajiado District Atlas, 1990). The population of the district was estimated to number 402,907 by 1997 (Kajiado District Development Plan, 1997-2001, 1997).

#### **Box 2 Narrative about the Maasai**

"No doubt on platforms and in reports we declare we have no intention of depriving natives of their lands, but this has never prevented us from taking whatever land we want....I have no desire to protect Maasaidom. It is a beastly, bloody system, founded on raiding and immorality, disastrous to both the Maasai and their neighbours. The sooner it disappears and is unknown, except in books of anthropology, the better." (Source: Commissioner Eliot, confidential letter, c. 1903 (Sorenson 1968: 76).

In the 1960s, in an effort to prevent Maasai land from being sold, the concept of establishing group ranches was introduced. The Maasai were generally favourable toward this proposal because it gave them access to the provision of water, veterinary services and improved livestock breeds. For the time being, this prevented the land from becoming the private property of Maasai elites and of non-Maasai. By the 1980s, 51 group ranches had been established, covering about 75% of the area in the Kajiado District. Initially, the group ranches were effective in stopping the massive establishment of individual ranches, primarily by non-Maasai people; improving livestock management techniques and infrastructure development (e.g. boreholes, dams, pipelines, etc.); and stimulating the establishment of schools, shops and health-care clinics. Group ranches, however, were a concept proposed and implemented from outside and they proved to be a superficial creation without a firm traditional or ecological basis. The project was highly oriented towards destocking the pastures and to the commercialisation of production, without taking into account the pastoralists' traditional practices, strategies and needs. Most of the projects ran into trouble caused by the difficulties in repaying loans and, by 1990, 78% of the group ranches had ceased to exist or were being broken up into individual ranches (Holland 1996; Rutten 1992).

Rutten (1992) found that, because of this subdivision, fewer than 10% of households could maintain the herds on their individual ranches without suffering a shortage of grazing land or without severely overstocking the ranch. The whole situation has had further devastating effects on the Maasai – culturally, economically and ecologically. As stated in a World Bank report (the World Bank initially supported the drive towards private ownership, but later opposed it), pastoralists in Africa faced particular problems in maintaining access to their traditional pastures. This happened not only to the Maasai, but also to the Samburu of Kenya.

The Kenyan government once hoped to set up group ranches as a way of increasing beef exports while retaining collective management. Recently, the government has promoted the privatisation of these ranches, asserting that corporate land tenure impedes rational land management. The World Bank study reports that Maasai elders regard private landownership as an “alien concept” and express fears that “subdivision may lead to a catastrophic change of lifestyle among the Maasai people.” The only source of income for the Maasai people is livestock. Their culture provided them with a system in which they could preserve the arid and semi-arid areas in such a way that certain areas were put aside in periods of drought in order to keep grazing areas in good condition. Although this has become more difficult in recent years, it still works within and among group ranchers, especially where upgraded cattle breeds are introduced. In the fragile semi-arid areas, however, it might even become impossible to keep livestock on an individual basis on small plots; it will also irrevocably lead to soil erosion, over-exploitation of water resources and desertification (World Bank, 1992: 37-38).

Because of abrupt changes in lifestyle and land ownership, poverty has become prevalent. The void formed by the decline of the pastoral economy could not be filled up by the introduction of sufficient viable and acceptable economic alternatives for the community. Similarly, the decline of traditional social structures has not been accompanied by a concomitant increase of modern public services and institutions such as schools, clinics, etc. (Chege, 1983). These trends have continued into the present, post-colonial independent era of Kenya’s history.

The experience of the Maasai has been similar to that of pastoralists in other African countries. It has often happened that, as a result of the privatisation of collectively owned pastures, wealthy and influential people obtain large parcels of land at the expense of the poor and weak pastoralists (Rutten, 1992). Rutten’s fieldwork in 1990 revealed that among the Maasai, heads of household increasingly have their main occupation outside the

Table 2 Occupation of settled and unsettled Maasai in %

Occupation	Settled (n = 165)	Unsettled (n = 175)
Unemployed	10	5
Unskilled labour	2	3
Skilled labour	6	1
House construction	18	38
Minor business	18	15
Animal husbandry	5	10
Farming	27	24
White-collar profession	8	1
Other	6	3

livestock sector. Only 27% and 24%, respectively, of settled and unsettled Maasai still have farming as their occupation. For animal husbandry, the figures are 5 and 10% (Table 2). Wage labour is becoming an increasingly important source of income and the arable farming has increased, too.

The settlement process was strongly resisted by the Maasai tribe for many years, because it leads to re-organisation of the domestic economy and changes in tribal social structure (Chege, 1983). Little is known about the impact of this change on the community and the social problems it has given rise to, such as substance use and abuse.

In Kenya, little systematic research has been carried out on drug use. The newspaper reports indicate that between 25 to 35% of high school and university students are involved in drug use. The youth aged 18 and below account for 60% of the total number of drug users. The most commonly used drugs are miraa (*khat*), tobacco, mandrax, *bhang* (i.e. marijuana), alcohol and glue (Onduso, 1996). It is traditional and part of social life among rural Kenyans, including the Maasai, to consume various drugs and alcoholic beverages during social functions. Studies on alcohol abuse done over the last 20 years reveal that the level of consumption is 24% among the 25-40 age group, in both rural and urban areas, although heavy drinking among teenagers is being increasingly reported (Acuda, 1992; Mburu and Acuda, in press; Mburu, 1991).

One study has been conducted on the use of the drug *khat* (*catha edulis*) among settled nomads in northeast Kenya (Haji, 1985). A significant increase in the use of this drug was found due to rapid social change, frustrations associated with unemployment and lack of alternative leisure activities, encouragement from peers, easy substance availability and religious laxity.

Drugs have an enormous negative economic impact on those who use such substance every day, because the cost to purchase them is more than what people can earn.

## **II.2 Comparison of the Bedouin and Maasai**

There are many differences between the Bedouin Arabs in Israel and the Maasai in Kenya. These include the nature and intensity of the settlement process, geographical distribution and proximity to other sectors of society, and their micro and macro-economic realities. There are also differences in traditional patterns of substance use and type and availability of substances. These differences preclude direct statistical comparisons between the Bedouin and the Maasai with regard to patterns of substance use and their larger social context.

In this section, we make a descriptive comparison between Bedouin and the Maasai, highlighting the major similarities and differences between the two populations, with specific reference to substance use.

The Bedouin Arabs in Israel and the Maasai in Kenya have both been seen as groups that could be moved around to serve the land and development needs of other groups of people within their respective societies. The successive reductions of territory and the settlement programmes have greatly altered the traditional way of life of both groups. The land losses were larger for the Bedouin than for the Maasai. The Israeli settlement plans represent efforts which are intended not only to resettle the Bedouin population, but also to urbanise them (*e.g.* settlement on 0.25-acre lots in towns). The Bedouin who have not moved to the government towns are considered to be illegal and all dwellings are subject to demolition, or eviction in the case of tents. Among the Maasai, the settlement effort is directed towards transforming them into ranchers or farmers with 10-acre farms. However, unlike the Bedouin, if they choose not to join the settlements and continue their traditional way of life, they are not considered law-breakers.

Settled and unsettled Bedouin communities are geographically closer to each other and, in general, have more frequent social and economic contact than settled and unsettled Maasai communities. In addition, both settled and unsettled Bedouin communities are integrated, to some extent, into the relatively industrialised economy and modern society of Israel. This now makes the licit and illicit substances which were not traditionally used by the Bedouin available to them.

Kenya is a developing country, with a relatively poor infrastructure.

22 Consequently, unsettled Maasai are more isolated from the settled Maasai

communities. Collectively, they are more isolated from the urban or more affluent sectors of Kenyan society.

Traditional use of licit and illicit substances in these two populations differed greatly. In the religiously homogeneous Muslim community of the Bedouin, tobacco was the only substance which was used traditionally. Its use, for the most part, was restricted to males, although prohibitions against its use were slightly more relaxed among elderly, post-menopausal Bedouin women. Bedouin were on drug trafficking routes through the Middle East and occasionally Bedouin worked as drug traffickers, but the phenomenon of substance use never developed among them, nor did it ever gain social acceptability.

Traditionally, the Maasai used a broad range of substances, including tobacco, alcohol (*e.g.* home brewed), and a large number of drugs for medicinal, religious and ceremonial purposes. Many of these substances were considered key components of specific social events and celebrations, and were used by both men and women within well-defined social settings and limits. With modernisation, new substances such as commercially produced cigarettes, beer and alcohol, have been introduced to the Maasai but the use of these substances is limited to regions near commercial centres. The results of this study show almost no evidence of the use of hard narcotics among either the settled or unsettled Maasai.

### **II.3 Levels of substance use**

The quantitative data analysis of substance use and the description of its social context is conducted separately for each population. Substance use among Bedouin and Maasai by age and settlement status is presented in Table 3.

A majority of the Bedouin (65%) reported using cigarettes, of whom 88% reported smoking daily. Cigarette use was significantly higher among unsettled (74%) than settled Bedouin (55%). The majority of smokers were found to be relatively young, with 68% under the age of 35. The average age of cigarette users was 32 among both settled and unsettled, while the average age when they first used cigarettes was 16 and 15 among settled and unsettled, respectively (Table 3).

Among the Maasai, the percentage of cigarette smokers was far lower. Only 8% of the respondents reported using cigarettes, of whom nearly half did so on a daily basis. Cigarette use was significantly higher among the settled (14%) than the unsettled Maasai (2%). The majority of those who used tobacco (74%) were over the age of 34, which is different than what

Table 3 Substance use by age and settlement status among Bedouin and Maasai.

Substance	Bedouin		Maasai	
	Settled (n = 150)	Unsettled (n = 162)	Settled (n = 170)	Unsettled (n = 179)
<b>Tobacco</b>				
Cigarettes				
% users	55	74	14	2
% daily users	45	69	6	1
Av. age of users	32	32	32	37
Av. age at 1 <sup>st</sup> use	16	15	20	26
<b>Chewing</b>				
% users	-	-	16	8
% daily users	-	-	12	7
Av. age of users	-	-	47	49
Av. age at 1 <sup>st</sup> use	-	-	26	31
<b>Sniffing</b>				
% users	-	-	10	19
% daily users	-	-	9	17
Av. age of users	-	-	50	43
Av. age at 1 <sup>st</sup> use	-	-	30	26
<b>Alcohol</b>				
% users	31	30	44	34
% daily users	9	9	23	15
Av. age of users	33	29	41	42
Av. age at 1 <sup>st</sup> use	20	21	25	29
<b>Drugs</b>				
<b>Traditional Maasai drugs</b>				
% daily users	-	-	16	79
Av. age of users	-	-	41	32
Av. age at 1 <sup>st</sup> use	-	-	29	19
<b>Khat</b>				
% daily users	-	-	1	-
Av. age of users	-	-	31	-
Av. age at 1 <sup>st</sup> use	-	-	24	-
<b>Cannabis<sup>a</sup></b>				
% daily users				
Av. age of users	15	15	1	-
Av. age at 1 <sup>st</sup> use	30	26	26	-
	18	18	21	-
<b>Hard drugs</b>				
% users	4	2	-	-
% daily users	2	1	-	-
Av. age of users	29	28	-	-
Av. age at 1 <sup>st</sup> use	23	26	-	-

<sup>a</sup> Cannabis products are marijuana and hashish, which are products from hemp, used as intoxicating substances.



exists among the Bedouin. The average age of users among settled Maasai was 32, compared to 37 among unsettled Maasai. The average age when they first used cigarettes was 20 among the settled and 26 among the unsettled (Table 3).

Characteristics related to chewing and snuffing tobacco among settled and unsettled Maasai are also found in Table 3.

Alcohol use among settled and unsettled Bedouin was almost equal. Thirty one percent of the settled and 30% of the unsettled Bedouin reported ever using alcohol (Table 3). The majority had done so within the last month. Beer was the most common alcoholic beverage used by both groups. The majority of alcohol drinkers (73%) were under the age of 35, similar to the figure for cigarette smokers.

Among the Maasai, the proportion of alcohol users was higher among the settled (44%) than the unsettled Maasai (34%). Over 85% of them had used it within a month before the interview. The proportion of males who used alcohol (59%) was higher than the proportion of females (22%). Most of the Maasai who used alcohol (71%) were over the age of 34, which was the same age group as for the majority of tobacco users.

Fifteen percent of the settled and unsettled Bedouin reported ever using illegal drugs, mainly cannabis (*i.e.* marijuana or hashish). Unsettled Bedouin were inclined to use hashish more frequently than the settled respondents. Settled respondents had higher rates of hard drug use. The majority (83%) of those who reported using illicit drugs were below the age of 35.

Among the Maasai, 15% of the settled and 33% of the unsettled reported ever using drugs (licit or illicit). The proportion of males (36%) who used drugs was higher than the proportion of females (14%). The majority of drug users (69%) were under the age of 35. The unsettled respondents reported primarily using traditional Maasai drugs and it was found that they use these drugs more often and to a relatively larger extent than the settled respondents do.

The frequency of use was also determined among both Bedouin and Maasai. Among the Bedouin, it was found that among the unsettled, 69% of the respondents smoked cigarettes every day. Among the settled the figure was 45%. None of the Bedouin chewed or sniffed tobacco. Among the unsettled, 9% used beer or wine on a daily basis, while among the settled the proportion was 7%. Most of the respondents presented themselves as only occasional beer or wine users. For example, 16% among the unsettled used them once a week and 13% among the settled used them once a month (Table 4). In both cases, settled and unsettled, 6% used strong liquor once a month.

Among the Maasai, it was found that 6% of the settled respondents smoked cigarettes every day while among the unsettled the figure was only 1%. Daily tobacco chewing and sniffing was relatively high among Maasai. Twenty one percent of the settled and 24% of the unsettled used tobacco (chewing or sniffing) on a daily basis (Table 4).

Table 4 Cigarette, tobacco and alcohol use among Bedouin and Maasai in %

Substance-use type frequency	Bedouin		Maasai	
	Settled (n = 150)	Unsettled (n = 162)	Settled (n = 170)	Unsettled (n = 179)
<i>Cigarettes</i>				
Every day	45	69	6	1
Once a week	3	1	1	1
Once a month	2	-	-	-
<i>Tobacco (chewing / sniffing)</i>				
Every day	-	-	21	24
Once a week	-	-	-	1
Once a month	-	-	1	1
<i>Beer / wine</i>				
Every day	7	9	11	15
Once a week	8	16	32	30
Once a month	13	6	24	22
<i>Strong liquor</i>				
Every day	2	0	3	-
Once a week	3	4	5	-
Once a month	6	6	1	2

With respect to types of intoxicating drugs used, hashish is the most commonly used drug type among the Bedouin. Five percent of the settled and 7% of the unsettled respondents used hashish every day, while 3% of the settled and 4% of the unsettled used it once a week. Twelve percent of the settled and 14% of the unsettled had used it within the month prior to the interview, and the same proportion of respondents had used it within the year prior to the interview. Another cannabis product, marijuana, was used in far lower amounts and frequencies than hashish. It was further found that 2% of the settled and 1% of the unsettled Bedouin used hard drugs on a daily basis. One percent of both settled and unsettled used them at least once a week (Table 5).

Table 5 Drug-use patterns and frequencies by type, in %, among Bedouin in Israel

Drug-use pattern \ Drug type	Marijuana		Hashish		Hard drugs		Other	
	Settled	Unsettled	Settled	Unsettled	Settled	Unsettled	Settled	Unsettled
<i>Frequency of use</i>								
Every day	1	0	5	7	2	1	1	1
Once a week	1	1	3	4	1	1	1	0
Once a month	1	0	4	2	1	0	2	1
Used last month	3	1	12	13	4	2	4	1
Used last year	3	1	12	13	4	2	4	1

With respect to the drug type use among Maasai, the traditional Maasai drugs are predominant among both settled and unsettled. Sixteen percent of the settled and 79% of the unsettled sample respondents used traditional drugs every day and 44% of the settled and 19% of the unsettled use them once a week. Ninety two percent of both settled and unsettled used traditional Maasai drugs in the last year. Khat (*Catha edulis*) and cannabis products (i.e. marijuana and hashish) were the other drug types used among Maasai. It was found that these drugs are used among settled Maasai only. Unsettled Maasai are still using traditional Maasai drugs exclusively.

Less than 1% of the settled Maasai use *khat* on a daily basis, but *khat* is still used by many of them. Seventy two percent used it in the year prior to the interview and 68% used it in the month prior to the interview. Cannabis products are also not used very often, less than 1% use cannabis every day and the same proportion use it once a month. 12% of settled Maasai used cannabis in the year prior to the interview and the same proportion used it in the month prior to the interview.

#### II.4 The social environment

The social environment variable considers the structure of a society's economic, legal, social, cultural and educational systems as a determinant of people's behaviour. The social and/or cultural breakdown of that system may lead to increased substance use. The study report analysed the social environment of Bedouin and Maasai and the behaviour of their people and youth. The results of both groups were compared.

Settled Bedouin were more satisfied with the quality of services in their communities and the behaviour of youths than unsettled Bedouin. Differences in satisfaction with the social life and with the availability of health and education services were observed, and they were much higher

between substance users and non-users than between the settled and unsettled respondents. Both cigarette smokers and drug users were less satisfied than non-smokers and non-drug users with their life in the communities and with health services, educational services and local community leadership. In contrast, alcohol users were more satisfied than non-users with the behaviour of youth in their communities.

In the case of the Maasai, the unsettled were more satisfied with their life in the communities and with the educational services, local leadership, and the behaviour of their youths than the settled. Satisfaction with the health services in their communities was, however, higher among the settled Maasai.

In both communities, the different types of substance users (tobacco, alcohol and drugs) presented a more or less similar attitude towards their social environment. The differences in terms of social environment variables between substance users of settled and unsettled communities among both Bedouin and Maasai were statistically more significant than those between users and non-users of the same community.

Among the Bedouin, substance users were less satisfied than non-users in relation to the social environmental variables. It is consistent with the general theoretical orientation that the social environment variable determines people's behaviour, including substance use. In the case of the Maasai, the unsettled were more satisfied than the settled with their life in the communities, the educational services, local leadership and the behaviour of their youths. It indicates that settled Maasai are relatively more prone to substance use behaviour than unsettled. The dissatisfaction with the social environment, in turn, may lead to increased substance use.

## **II.5 Social bonding**

The social bonding variable concerns social organisation, conventional bonds with family, peers, school and other community groups. Breakdown in social bonding increases the chances of bonding with delinquent peers and increases the chance of substance use. The study analysed social bonding in relation to marital status, living with an extended family, school completion and religiosity.

Both settled and unsettled Bedouin indicated that they oppose their children missing school, smoking cigarettes, using alcohol or drugs, or spending time with friends who have the habit of substance use. Substance users had a different opinion on this aspect. Cigarette smokers were less opposed than non-smokers to the idea of their children smoking cigarettes, and alcohol drinkers were less opposed than non-drinkers to their children missing school, drinking alcohol or drinking hard liquor at parties.

Similarly, drug users were less opposed than non-drug users to their children missing school, using substances (whether it be tobacco, alcohol or illegal drugs) and spending time with friends using substances.

With regard to the substance users themselves, statistical tests showed that Bedouin cigarette smokers were more likely than non-smokers to have dropped out of school. However, there was no variation between cigarette smokers and non-users with respect to marital status and living with extended family. Alcohol drinkers tend to be single and consider themselves more secular than those who do not drink alcohol. Moreover, alcohol drinkers were less likely to live with the extended family than non-drinkers.

Illicit drug users generally considered themselves secular. The proportion of drug users who were single was significantly higher than the proportion among non-drug users. Non-drug users were much more likely than drug users to be living together with the extended family. Since marriage in the Bedouin community – both settled and non-settled – is arranged by the extended family, there are fewer chances for those who are known drug users to get married. The proportion of drug users who dropped out of school was also significantly higher than the proportion of non-drug users.

Among the Maasai, tobacco users were more likely to adhere to traditional customs and religious activities, but they considered themselves more secular than non-tobacco users. Compared with the unsettled tobacco users, the settled tobacco users were more aware of the value of education their children should receive. Settled tobacco users were relatively more concerned than unsettled tobacco users about their children missing school, smoking, and spending time with substance users.

Alcohol drinkers were more likely to adhere to traditional customs and religion than non-drinkers. About 80% of the settled drinkers were Christian, while 54% of the unsettled drinkers adhered to traditional religion. Unsettled alcohol drinkers were more likely than settled drinkers to live together with their extended families, to consider themselves secular and be more likely to have dropped out school.

Those who did not use drugs were more likely to live together with the extended family than drug users. Unsettled drug users were much more likely to have dropped out of school and to adhere to traditional custom and religion.

Unsettled Maasai respondents expressed more opposition than settled respondents to the ideas of their children missing school and spending time with friends who smoked cigarettes and drank alcohol. Settled respondents, however, expressed more opposition than unsettled respondents to the idea of their children using drugs or spending time with friends who use drugs.

In terms of the study cohort, settlement status (*i.e.* settled or unsettled) was more strongly related to the social bonding variables than substance use status.

It is evident that substance users have relatively weaker family bonding, a greater likelihood of remaining unmarried and that they pay less attention to their own education and that of their children. This result reinforces the theoretical assumption that the social bonding variable is significantly related to substance use. Conventional bonds with family, peers, school and other community groups are important factors for determining whether a person engages in substance use.

## **II.6 Social learning**

The social learning variable is related to opportunities for observing and modelling oneself on substance use behaviour. It takes into account how substance use behaviour is perceived in the respective communities, in people's knowledge of substance availability in their surrounding (especially hard drugs), in their normative beliefs, including collective ignorance of norms and in the social reinforcement towards substance users.

Statistical analyses revealed that relatively more unsettled than settled Bedouin were likely to believe that there was a major tobacco problem in their communities and they knew more youth who smoked cigarettes. Compared to non-smokers, a relatively higher number of smokers believed that there was a tobacco and illicit drug problem in their communities. They also knew of more youths who used tobacco and illicit drugs. Settled smokers knew of adults who used drugs in their community, but were unaware of young drug users.

Both settled and unsettled Bedouin believed that alcohol was not a major problem in their communities, but settled respondents knew more youths using alcohol in their communities than did the unsettled. Alcohol drinkers were more likely than non-drinkers to think that there were alcohol and illicit drug problems in their communities and they knew of youths who used alcohol and illicit drugs.

The majority of Bedouin (53%) believed that illicit drug use was a minor problem in their community; 18% believed it was a major problem; and the remainder had no idea or held the opinion that there was not a problem at all. The vast majority (96%) of the drug-using respondents believed that there was a real drug problem in their communities, as compared with 66% of the non-users. In addition, drug users were more likely than non-users to hold the opinion that there was a tobacco problem in their communities, and to know adults and youth who used tobacco, alcohol and drugs.

A majority (53%) of settled and unsettled Bedouin believed that it was possible to buy illicit drugs in their communities. Seventy two percent of the alcohol users and 94% of the drug users mentioned the easy availability of illicit drugs in their community. In addition, cigarette smokers were more likely than non-smokers to express the opinion that illicit drugs in their communities might be easily available.

With respect to social reinforcement, settled and unsettled Bedouin held similar views about drug users. They believed that drug users were a peril to their community and should be treated harshly, but they also expressed sympathetic opinions about help. Alcohol and drug users were more likely to view drug use as socially acceptable. Those who did not use any kind of substance (cigarettes, alcohol, drugs), viewed drug use as a danger to their society. They felt that the matter should be addressed seriously and that drug users should be treated harshly. Settled Bedouin substance users were more likely than unsettled users to view drug users as a danger to their community and they also considered that they should be treated harshly. Both settled and unsettled non-substance users have common normative beliefs in the issue of social reinforcement related to substance use. The majority of settled and unsettled Bedouin expressed the view that it was too easy for people to buy illicit drugs in the community. Settled respondents knew more of youths using alcohol in their communities than did the unsettled.

Regarding the Maasai community, the settled respondents were more inclined to perceive tobacco use as a problem in their community than the unsettled Maasai and knew more youths who used tobacco. Both settled and unsettled respondents believed that alcohol use was a problem in their communities. Most of the respondents, regardless of settlement and substance use, expressed the view that there was not a problem of illicit drug use in their community.

Unsettled Maasai knew more youths and adults in the community who used drugs than the settled respondents did. Drug-using Maasai were more likely to say that there was a problem of drug use in their community and they knew more drug-using adults in their communities than non-drug users did.

Thirty eight percent of settled and 23% of unsettled Maasai confirmed that it was possible to buy illicit drugs in their communities. More unsettled than settled respondents, including substance users, were inclined to believe that their community tolerated drug users. With regard to social normative beliefs, drug users agreed with the statements: "Using drugs is acceptable in society", and "My community tolerates drug users", while non-drug users

disagreed with these statements. With respect to social reinforcement, settled respondents were more likely to think that drug users were a danger to their community.

Settled and unsettled Maasai both expressed the view that it was possible to buy illicit drugs in the community, which presents the scenario of people being exposed to substances in the community. Settled respondents knew of more youths using tobacco in their communities than the unsettled. On the other hand, unsettled respondents knew more of youths using drugs in their communities than the settled. Unsettled non-substance users had more liberal normative beliefs towards substance use than did settled non-substance users.

## **II.7 Knowledge, attitudes and behaviour**

Knowledge, attitudes and behaviour includes knowledge of the psychological and social consequences of substance use; personal beliefs about the consequences such as health hazards; general values and specific evaluations of the consequences; attitudes towards substance use; behavioural intentions; and trial behaviour.

Settled smokers and alcohol drinkers among the Bedouin were more aware of the fact that smoking and drinking affects one's health negatively and they knew more about the health hazards of smoking and drinking than unsettled smokers and alcohol drinkers. Both settled and unsettled Bedouin were aware of the negative consequences of drug use for a person's health, family and social relationships, and for the community. Both groups also believed that it is important to be well informed about the health hazards of using drugs.

Bedouin tobacco and alcohol users were more open than non-users to viewing drug usage as an enlightening experience and as a mechanism for relieving the pressures and problems related to work and social change. Statistical analyses also revealed that those who do not use any kind of substance were more likely to believe that drug use has multiple negative consequences, including health hazards, increased criminality and moral decay.

Drug users believed that drug use could be an enlightening experience and can help one to cope with workload and get rid of social pressures, while non-drug users did not believe this. Settled drug users agreed with the statements: "Drug users can't be trusted", and "Drugs destroy good social relationships with family and friends"; while unsettled drug users disagreed with these statements.

Among the Maasai, settled users of tobacco, alcohol and drugs believed that substance use adversely affected their health, work and life. Unsettled



respondents were more receptive than settled respondents to the idea of experimenting with drugs. However, they were less concerned about the negative effects of drugs on health and social and family relations. Tobacco users differed from non-users only in that they were more open to trying drugs.

## **II.8 Conclusions**

The setting of this study, in the unsettled (and even the settled) sectors of the Bedouin and the Maasai, rendered traditional methods for drawing random samples (such as using a telephone directory or using population censuses, addresses, etc.) inapplicable. For both groups, local Bedouin and Maasai expertise was used to map out the populations and to obtain broad geographically representative samples of the populations. Given the study's non-random samples, the findings cannot be taken as conclusive evidence. They provide, however, a broad, geographically representative picture of the situation of substance use in two developing populations that are in the midst of a major social and economic transition.

Among the Bedouin, the only traditionally accepted substance was tobacco, and it is still the most widely used substance among them. The use of both alcohol and drugs was strongly condemned by the community, and known users tend to be rejected by the larger Bedouin community. Since the social environment of Bedouin now encompasses a mixture of settled and unsettled Bedouin, Israeli Jews and a commercial economic environment, they are exposed to conflicting sets of values and behavioural norms. Substances, including hard drugs, are easily available. The new social environment is different from the traditional one.

The majority of Bedouin substance users in the geographically broad study sample were under the age of 35. This strongly suggests that substance use and, in particular, alcohol and drug use, represents a new phenomenon in this society. The Bedouin are in a transitional phase, which exposes them extensively to new and conflicting sets of social values, norms and behavioural patterns. Among the Bedouin, more differences appeared to exist between substance users and non-users than between Bedouin living in and outside the planned settlements.

Among the Maasai, settlement status was a predominant factor in shaping their lifestyles. It also greatly influenced the availability of substances, the patterns of substance use and their attitudes towards it. Unlike the Bedouin, greater differences were found between settled and unsettled respondents than between substance users and non-users.

Various types of tobacco, alcohol and drugs were traditionally used among the Maasai and were considered as an important aspect of their traditional social life. The majority of Maasai tobacco and alcohol users were over the age of 34, pursuing the traditional social patterns of substance use. Substance use was accepted to a certain extent and with limits, but neither settled nor unsettled Maasai were happy to see the new patterns of substance use growing among their youth, which was different from the traditional patterns of substance use. Though there was no evidence of hard drug use, the community perceived this substance use, which was different from the traditional type, as a sign of social disintegration.

Regarding the sedentarisation process in general, indications of dissatisfaction were found among both the Bedouin and the Maasai. Unsettled Maasai generally exhibited more satisfaction with their life than settled Maasai, despite their relatively low access to services and infrastructure. Unsettled Bedouin, who live in third-world conditions right next door to the first-world conditions of the Israeli Jews, expressed dissatisfaction with the lack of services and infrastructure in their communities. Settled Bedouin indicated that their move to a planned town had created a new array of social and economic problems, and that it was a move they regretted they had made.

## **III. Discussion**

### **III.1 Scientific relevance**

The results of this study add further support to the finding that the socio-cultural environment has a direct effect on people's attitudes, norms and behaviours in relation to substance use (Mandelbaum, 1979; Ong and Isralowitz, 1996). In addition, this study generates new knowledge of nomadic and semi-nomadic populations, of the settlement process, shifting values and of cultural norms. The findings, among both the Bedouin and Maasai, support the theoretical framework of the study, indicating that the theories, although developed in the West, are relevant to non-western communities undergoing a radical social change, and put an emphasis upon understanding the broader social context. Consistent with the study hypotheses, the radical social change in the process of sedentarisation has led to the breakdown of traditional social structures, and an inclination (particularly in the eyes of their respective communities) towards unacceptable patterns of substance use among Bedouin and Maasai youth.

### **III.2 Recommendations for further research**

As this was an exploratory study, the findings illuminate many areas in which further in-depth research is needed. This may include:

- documentation of traditional substance use practices among the Maasai and the specific contexts in which they occurred, and an evaluation of how these practices have evolved in both settled and unsettled contexts;
- an in-depth anthropological and pharmacological study of the traditional drugs used by the Maasai;
- a study of how the lives of Bedouin women are affected by substance use in the Bedouin community, if not through direct use, then through the use by family and other community members;
- a comprehensive study among Bedouin drug addicts of their prison and rehabilitation experiences with a view to developing more effective programmes;

- an in-depth study, among both the Maasai and the Bedouin, on the role of religion in encouraging or discouraging substance use, setting social norms and frameworks for reinforcement, etc.

### **III.3 Practical applicability**

As the first study of its kind among the Bedouin and Maasai, the results have a great practical value. The study provides a detailed description of the state and social context of substance use in these two communities. Until now, very little systematic data or information had been available about them.

The relevance of this data is strengthened by the fact that both the Bedouin and Maasai are in the process of radical social change from their traditional nomadic or semi-nomadic life. In this transition process, socially unacceptable patterns of substance use emerge, which are regarded as a sign of further social disintegration.

Although the study mandate does not mention a direct involvement of the research team in the planning and policy-making process, it is anticipated that the information and outcome of this research will be of great practical value in that process. The effective use of these research findings must start with the dissemination to relevant governmental and public institutions responsible for the planning, resource allocation, and implementation of sedentarisation strategies and substance use/abuse education, prevention, and intervention strategies.

It was anticipated that the outcome of this report would be of use for developing a framework for formulating substance use/abuse policies and programmes for nomadic populations in both countries. Currently, those communities are passing through a transition phase towards settled life and they are the most underserved populations in their respective countries.

Finally, the findings can be used for further assessment of subsequent problems and needs, as well as for the development of intervention strategies. Moreover, this study provides a general overview of the status of substance use among nomadic and semi-nomadic populations in transition.

## **IV. Recommendations**

These are initial possibilities for applying the results of this study, on the basis of which the following recommendations can be made:

1. It is recommended that the report should be translated into the local languages of each country. The translation should be distributed to national authorities, such as the Ministries of Education, Planning, Law Enforcement, Health and Social Welfare. These are the bodies that are responsible for policy making, planning and implementing settlement, resource allocation, and intervention strategies. The results should further be disseminated among local agencies such as schools, the local community body, non-governmental organisations, grass-roots level community organisations, religious organisations, etc. The proper use of the outcome of this report would greatly assist effective and successful planning and implementation.
2. There was also great interest within the communities themselves in the outcome of the research. It is recommended that the findings should be disseminated to local traditional leaders and religious groups as a basis for the development of community-based education and intervention strategies. The summary of the results should be disseminated back to the respective communities through workshops, schools programmes, community gatherings, religious gatherings, local governmental offices and universities.

There is a great need for educational, prevention and rehabilitation programmes to be developed for both the Bedouin and the Maasai, as there are virtually no programmes for either of these two communities in transition.



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# Appendix I

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## Appendix II

### Follow-up of the project: capacity building and project-related publications

Kenyan researchers were trained to use the very first computer in the Psychiatry Department of the University of Nairobi, and all the relevant programmes for data entry and analysis. These knowledge and skills are basic for bringing the research capacity of the Kenyan researchers involved in the project into the computer age. A great deal of emphasis was placed upon training the Kenyan team in these skills, and the expected output is that they will now be able to conduct research of this quality independently. In addition, through the recommendations of the Israeli investigator, a number of texts on research methodology and data analysis were obtained by the Kenyan researchers involved in the project and now serve as resources for the Psychiatry Department. In conclusion, the team of Kenyan researchers at the University of Nairobi, who had not worked with computers in their research previously, were provided with the hardware, software and general methodological and computer-skill research training, that now makes it possible for them to carry out such research independently. In addition, these skills can be transferred both to other colleagues in their department, as well as to their graduate and undergraduate students.

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Abu-Saad, I. (2001). 'Social change and substance use among Bedouin Arabs in Southern Israel', in R. Isralowitz, M. Afifi, and R. Rawson (eds.) *Drug addiction policy and program development: Middle East people in transition*. New York: Praeger Publishers (in press).



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