



# I-ADAM IN EIGHT COUNTRIES

## APPROACHES AND CHALLENGES



R E S E A R C H R E P O R T



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## I. Overview of Demographic Profile of Nation

Malaysia was created in 1963 through the merger of Malaya (which became independent of Britain on August 31, 1957), the former British Singapore (which later seceded from Malaysia in 1965), and the provinces of Sabah and Sarawak in northern Borneo. The country is divided into two main regions 650 kilometers apart, separated by the South China Sea: Peninsular Malaysia and East Malaysia (Sabah and Sarawak). Peninsular Malaysia borders Thailand to the north and Singapore to the south. Sabah and Sarawak border Kalimantan (the Indonesian part of Borneo) and Sarawak surrounds the tiny enclave of Brunei. The peninsula's west coast borders the Andaman Sea (Strait of Malacca). The east coast of the peninsula, Sabah, and Sarawak all adjoin the South China Sea.

Malaysia has a land area approximately the size of New Mexico and a population of more than 23 million. Its capital, Kuala Lumpur, has a population of more than 1 million. The country's three largest ethnic groups are Malay, Chinese, and Indian, and the main languages spoken there include Bahasa Malaysia (the official language), English, Chinese dialects, Tamil, and indigenous dialects. Malaysia has 13 States and 2 Federal Territories, one of which contains the capital. Exhibit 1 shows demographic information for Malaysia.

Several decades of sustained economic growth and political stability have made Malaysia one of Southeast Asia's wealthiest countries. It ranks among the medium nations (61st) in worldwide human development. Exhibit 2 shows economic and development information for Malaysia.

Penang, a relatively small but economically developed island State located in the Andaman Sea off the northwestern coast of the Malay peninsula, was chosen as the site for Malaysia's I-ADAM pilot program. The State was chosen not only for convenience but also because it had a comparatively high rate of drug use and the crimes committed there are similar to those in Malaysia's larger cities.

As of 1998, the main drug abused in Malaysia was heroin (54.7 percent of recorded cases of drug abuse). In Penang, 557 cases of heroin abuse were reported in the first 3 months of 2000. In 1998, 4,821 cases of substance abuse<sup>1</sup> were reported in Penang, most of which were among 20- to 39-year-olds.<sup>2</sup> From January to November 1999, Penang recorded 4,959 drug users, more than any other State.<sup>3</sup> These high prevalence rates indicate the need for appropriate intervention strategies to address substance abuse.

Little is known about the prevalence of alcohol abuse in Malaysia. Only recently was a law passed against drunk driving. Enforcement agencies in Penang rarely test arrestees' alcohol levels. ADAM could help clarify the extent of the alcohol abuse by obtaining basic background information.

## II. Description of Criminal Justice System, Arrest Process, and Detention System

Malaysia is a federal parliamentary democracy with three branches: executive, judicial, and legislative. The head of state, the Yang di-Pertuan Agong (paramount ruler), is a constitutional

### Exhibit 1. Basic Demographic Characteristics of Malaysia

Geographic area	330,113 km <sup>2</sup>
Estimated population	23.26 million (as of November 22, 2000)
Ethnic distribution	Bumiputra (Malay), 58.1%; Chinese, 24.3%; Indian, 6.9; others, 3.2%; noncitizens, 7.5%
Religious affiliation	Islam (official), Buddhism, Daoism, Hinduism, Christianity, Sikhism
Gender distribution	Males, 51.2%; females, 48.8%
Age distribution	0–19 years, 43.2%; 20–39 years, 33.0%; 40–59 years, 17.7%; 60–75+ years, 6.1%
Life expectancy	70.2 years (male); 75.0 years (female); 72.2 years (average)
Population growth rate	2.3%
Birth rate	24.5 per 1,000
Total fertility rate	3.29 children per woman
Death rate	5.25 per 1,000
Literacy rate (age 15 and older)	86.4% (total); 82.0% (female); 90.7% (male)
Languages	Bahasa Malaysia (official), English, Chinese dialects (principally Cantonese and Mandarin), Tamil, Telugu, Malayalam, Panjabi, Thai, and indigenous languages
Crime rate	820 per 100,000
Drug use rate	734 per 100,000
Urbanization rate	NA
Political subdivisions	13 States and 2 Federal Territories

Sources: *National Census Data*, Kuala Lumpur: Ministry of Home Affairs, 2000; Central Intelligence Agency, *The World Factbook: Malaysia*, Washington, DC: Central Intelligence Agency, 2000; United Nations Development Programme, *Human Development Report 2000*. New York: Oxford University Press, 2000.

monarch who is elected to a 5-year term by and from among the hereditary rulers of nine States. The Parliament (Parlimen) has two houses: the lower house, the Dewan Rakyat, to which representatives are elected, in principle, to 5-year terms, and the upper house, the Dewan Nagara, to which senators are appointed by the paramount ruler and the state legislatures for 3-year terms. The leader of the party who wins a plurality of seats in the House of Representatives becomes the prime minister and head of the Government. Judges of the Supreme Court are appointed by the paramount ruler on the advice of the prime minister.<sup>4</sup>

In colonial times, Malaysia was confronted with the problem of opium use. The British colonial Government introduced the Dangerous Drug Ordinance and Poisons Ordinance in 1952. Malaysia's current antidrug laws, especially those dealing with drug sales, are among the world's toughest. Anyone arrested with more than 15 grams of heroin faces a mandatory death sentence. Today, Malaysia has five main statutes on substance abuse:

- Dangerous Drug Act, 1952.
- Poisons Act, 1952.
- Drug Dependence Act (Treatment and Rehabilitation), 1983.
- Dangerous Drug Act (Special Preventive Measures), 1985.
- Dangerous Drug Act (Forfeiture of Properties), 1988.

## Exhibit 2. Economic Information for Malaysia

Gross domestic product (GDP)	US\$171 billion
GDP growth rate	5.8%
GDP per capita	\$3,238
GDP composition by sector	Industry, 46%; services, 42%; agriculture, 12%
Major export partners	United States, 23%; Singapore, 16%; Japan, 11%; Hong Kong, 5%; Netherlands, 5%; Taiwan, 5%; Thailand, 3%
Major export commodities	Electronic equipment, petroleum and liquefied natural gas, chemicals, wood and wood products, rubber, textiles
Labor force	9.3 million
Labor force composition by sector	Manufacturing, 27%; agriculture, forestry, and fisheries, 16%; local trade and tourism, 17%; services, 15%; government, 10%; construction, 9%
Poverty rate	15.5%
Unemployment rate (as of June 2000)	3.3%
Human development index (1998)*	0.771

\*The human development index measures a country's average achievement in three basic dimensions of human development: a long and healthy life, knowledge, and a decent standard of living. The index is a composite index of three variables: life expectancy at birth; educational attainment (adult literacy and the combined primary, secondary, and tertiary enrollment ratio); and per capita GDP (measured as purchasing power parity in U.S. dollars). Countries are grouped into three categories: high human development ( $\geq 0.800$ ); medium human development (0.500–0.799); and low human development ( $< 0.500$ ). See United Nations Development Programme, *Human Development Report 2000*. New York: Oxford University Press, 2000.

Sources: *National Census Data*. Kuala Lumpur: Ministry of Home Affairs, 2000; Central Intelligence Agency, *The World Factbook: Malaysia*. Washington, DC: Central Intelligence Agency, 2000; United Nations Development Programme, *Human Development Report 2000*. New York: Oxford University Press, 2000.



When someone is detained for an offense, a remand order is obtained from the court within 24 hours after the arrest to facilitate investigations. An arrestee can be detained under remand for up to 14 days, after which formal charges must be made or the arrestee released.

Most arrestees are tested for drug use. If an arrestee tests positive for drugs, a medical officer will determine whether the arrestee is drug dependent, usually through urine tests and physical examinations. If an arrestee is found to be drug dependent, the National Narcotics Agency (NNA) recommends the most appropriate treatment to the court. The two types of treatment are community supervision and institutional rehabilitation, both of which normally last for 2 years, and both of which are discussed in more detail in Section III. First-time drug offenders and those who are found to have strong family support are normally recommended for community supervision. Habitual and hardcore drug users are sent for institutional rehabilitation. After 2 years of institutional rehabilitation, the drug user is placed under community supervision for another 2 years. If the supervision rules are broken during this period, the offender can be sent to prison for not less than 3 years.

### **III. Status of National Drug Policy**

In 1996, the NNA approved the new strategies of the National Drug Policy, in the following priority order:

- Prevention.
- Enforcement.
- Treatment and rehabilitation.
- Regional and international cooperation.

Prevention, enforcement, and treatment and rehabilitation are the three main strategies; international cooperation is sought to support these strategies.

#### **Prevention**

Prevention is a long-term strategy aimed at protecting individuals from drugs. Prevention programs emphasize individual resistance to drug use and efforts to create an environment that will protect individuals and community from drug abuse. These efforts include—

- Encouraging young people to reject the drug lifestyle.
- Changing society's perception of and attitude toward drugs.
- Mobilizing the community in drug abuse prevention programs.
- Providing alternatives to drugs and encouraging healthier lifestyles.

This strategy has two components: primary and general prevention. Primary prevention involves developing an individual's inner strengths through education in positive religious, moral, cultural, and social attitudes and values. Programs that have been implemented include preventive drug education in schools, teacher training, and guidance and counseling services. General

prevention involves the community in drug control and prevention. General prevention strategies have been implemented through information campaigns, publicity programs, and workplace prevention initiatives.

## **Enforcement**

Enforcement has three main components: interdiction, legislation, and intelligence. Interdiction aims to reduce the supply of drugs on the market by preventing the smuggling of illicit drugs into the country. The strategy emphasizes strengthening and intensifying enforcement measures to curb the entry of illicit drugs by land, sea, and air. At the same time, aggressive efforts are carried out continuously to stop trafficking and sales of illicit drugs within the country.

Legislation complements prevention efforts by imposing severe penalties that make it dangerous to possess, supply, traffic in, or abuse drugs. As noted above, Malaysia's drug laws are among the world's toughest.

Intelligence from inside and outside the country can be a major asset in combating syndicates and individuals involved in drug smuggling. Intelligence gathering has been strengthened by the establishment of a Special Intelligence Team in border areas with Thailand and in the States of Sabah and Sarawak, which can carry out joint operations with the intelligence services of other countries to curb the supply of illicit drugs at the source.

## **Treatment and Rehabilitation**

This strategy has two goals: eliminate drug dependency and prevent recidivism. To eliminate drug dependency, addicts are ordered to participate in one of two treatment and rehabilitation programs: community supervision or institutional rehabilitation. Community supervision is rehabilitation in a community setting. Drug users under community supervision must report weekly to the district NNA officer for urine testing and counseling. Anyone found to be using drugs will be sent into institutional rehabilitation.

Institutional rehabilitation occurs at one of 25 residential drug rehabilitation centers. These centers treat drug addiction through a combination of "cold turkey" methods, counseling, and vocational therapy. Treatment normally lasts 2 years.

Antirecidivism efforts focus on strengthening the attitudes and behavior of ex-addicts to prevent relapse and to enable them to live drug-free lives. The programs implemented include supervision, counseling, and social support programs at district-level service centers operated by the NNA.

## **International Cooperation**

The national drug strategy needs international support and cooperation. Its objectives are to enhance regional and international cooperation in efforts to control and prevent drug abuse and trafficking and to strengthen national efforts toward international drug control and prevention.

## **IV. Background History to I-ADAM**

The relationship between alcohol and other drugs (AOD) and crime has not been studied much in Malaysia. Although drug issues manifest themselves at every level of the criminal justice system, from street crime to international trade in drugs, the relationship between AOD and crime is difficult to specify because most crimes result from a combination of situational, personal, cultural, and economic factors. There are not enough data currently available to provide definitive evidence to law enforcement authorities, service providers, and researchers of the link between drug use and the drug trade and crime in general.

The National Institute of Justice, the research arm of the U.S. Department of Justice, invited representatives of the Center for Drug Research, Universiti Sains Malaysia, to participate in the first International Arrestee Drug Abuse Monitoring (I-ADAM) conference in Chicago in 1999. As a result of that meeting, Malaysia decided to implement an ADAM pilot project in Penang. The project designers hope to show the feasibility of implementing the ADAM mechanism as an ongoing activity in Malaysia. By measuring AOD use among arrestees, they hope to take the first steps to reduce AOD-related crimes, which is an important component to reducing crime in Penang.

## **V. Goals and Objectives**

The general aims of the ADAM project are as follows:

- To assess the feasibility of implementing and sustaining an ADAM project in the State of Penang.
- To investigate the relationship between alcohol and other drugs and crime.
- To better understand the prevalence of drug use among hidden populations (subsets of the general population whose membership cannot be readily distinguished or enumerated based on existing knowledge or sampling capabilities) and its relationship to crime.<sup>5</sup>
- To disseminate the data collected from the project to local health and law enforcement agencies.
- To participate in an international network of ADAM sites in order to share information and develop new methods of measuring arrestee drug use and of applying the information learned to the problems of reducing drugs and crime.

The project's specific objectives are to—

- Identify the extent of AOD use among recent arrestees in Penang.
- Identify patterns of substances abuse among arrestees in Penang.
- Investigate the extent of alcohol and substance abuse among cases referred to the hospital by police (e.g., automobile accidents where alcohol or drugs may have contributed).
- Assess the influence of environmental conditions on AOD use.

- Obtain a profile on arrestees (e.g., sociodemographic data, arrest history, types of offenses).
- Investigate the correlation between AOD use and crime.
- Understand arrestees' perceptions of crime and attitudes toward law enforcement.
- Test U.S. survey instruments in local populations.
- Develop and validate reporting techniques such as self-report and biological measures (urine testing).
- Develop specific intervention techniques for various sectors (e.g., health, criminal justice, welfare, corrections).

## **VI. Getting Started**

### **A. Obtaining Funding**

Funds for the pilot phase were obtained through a grant application by the NNA to the national research program known as IRPA (Intensified Research in Priority Areas). IRPA supports research that it believes is a national priority and has the potential to contribute to the formation of local policies.

### **B. Data Collection**

NNA officers and a research officer have been appointed to collect data from participating police stations. Police officers will notify the research team daily on how many arrests were made the day before, and the data collectors will visit the police station daily to collect data from arrestees.

### **C. Facility Access**

To ensure that the project would be implemented in accordance with ADAM procedure, the Center for Drug Research, Universiti Sains Malaysia, collaborated with NNA and the police in Penang. Once this collaboration was established, access to facilities was arranged by NNA officers and the local police.

The plan is that the police stations involved in the study will call the NNA office daily to tell how many arrestees were brought into each station the day before. The research officer from the Center for Drug Research will randomly pick every 10th arrestee brought in the day before to be interviewed. The research officer will conduct the interview at the police station within 48 hours of the arrest. A voluntary urine test will also be carried out to determine whether the interviewee recently used drugs.

## D. Knowing the Catchment Area

Penang has two police divisions, the northeast and southwest divisions. The northeast division was selected as the catchment area for this study. The division has 4 teams with a total of 12 police stations, all of which will participate in the study. Exhibit 3 lists the participating police stations.

## E. Drug Testing Issues

### Urinalysis

The validity of interviews and self-reported data can be verified by chemical drug testing of biological specimens (urine). Litmus paper is being used for the initial test on the urine sample. The litmus paper used is in accordance with U.S. National Institute on Drug Abuse (NIDA) standards; its detection sensitivity is 50 mg/mL or greater. Results are received in 5 minutes. If the litmus paper shows a positive result, the urine is sent to a Government pathologist for confirmatory tests.

Because the police collect the urine specimens, arrestees may not give the specimen voluntarily, which introduces bias into the testing. The test results of arrestees who refuse to participate in the study are not examined and, hence, cannot be compared with the results of those who agree to participate.

## F. Instrument Issues

### Questionnaire

The ADAM questionnaire to be used in this study was translated into Bahasa Malaysia, then translated back into English as a check on the accuracy of the translation. A pretest was carried out among a few arrestees to determine the clarity of the translation.

**Exhibit 3. List of Police Stations Participating in Penang ADAM Project**

Team A	Team B	Team C	Team D
Palau Tikus	Petani Road	Air Itam	Sungai Nibong
Georgetown	Dato Keramat	Bandar Baru	Jelutong
Central		Kampung Baru	
Beach Street		Tanjong Tokong	

## **VII. Barriers to Developing I-ADAM**

The research team established a collaborative effort to ensure that administrative barriers do not hamper the implementation of the project. Because this study is a pilot project, the actual barriers can be identified only after the study is completed. Several potential problems can be noted, however, including the following:

- As noted above, the police will administer the urine testing, which may reduce participation by interviewees.
- A sample of every 10th arrestee may yield too few participants to get a truly representative sample of arrestees (see section IX for a discussion of the potential sample size).
- Because the arrestees will have already been in jail for a day when the researchers are notified of the arrest, the researchers have less opportunity to interview the arrestees before 48 hours have passed since the arrest. This could become more of a problem if several stations process a larger than usual number of arrestees at once or if not enough research officers are available to handle all 12 stations at a given time.

## **VIII. National Stakeholders Involved in the Development of I-ADAM**

The Center for Drug Research, Universiti Sains Malaysia, is collaborating with the NNA to implement the ADAM project in Penang. Researchers from the center and NNA officers also have met with the police to brief them and to obtain their permission to conduct the study. As the source of the funding for the study, IRPA is a stakeholder, as are the national and local entities that form IRPA's constituencies.

## **IX. Methodology**

### **Study Design**

The Penang I-ADAM project is a 1-year pilot project with a cross-sectional design to assess the feasibility of developing an ADAM system.

## Sample Size

As the study is still ongoing, the actual sample size is not yet known. It is hoped that approximately 150 arrestees will be interviewed and tested in the first 6 months of the study. The arrestees are being selected randomly for interviews and testing (see section VI, D).

Men 18 years of age and older are being selected for the study. Persons younger than 18 are defined as juveniles in Malaysia, so they come under a different jurisdiction. Because only a small fraction of those arrested in Penang for AOD offenses are women, it would not be practical to include women in the sample.

All arrestees in the selected police stations who have been in custody less than 48 hours and are not considered violent or mentally ill are eligible to be recruited for the study (with their consent). The 48-hour limit will ensure the validity of the urinalysis. Exhibit 4 lists the crimes that are to be included in the sample.

The following arrestees will not be eligible for inclusion in the study:

- Children or juveniles.
- Persons who are mentally ill.
- Persons who are considered violent.
- Persons who have been detained longer than 48 hours.

## X. Training Issues

The research officer from the Center for Drug Research and the officers from NNA were trained by the principal investigators on conducting interviews and the survey methodology. In addition, police officers were briefed about the project to ensure that they understand its objectives. The research officers from the Center for Drug Research and NNA have experience dealing with the addict population and are familiar with the ADAM interview techniques.

**Exhibit 4. List of Offenses to Be Sampled in ADAM Project**

Abduction	Indecent assault
Arson	Intercourse with an underage girl
Assault	Kidnaping
Carjacking/truck hijacking	Malicious damage to property
Common burglary	Motor vehicle theft
Driving under the influence of alcohol or other drugs	Murder or attempted murder
Embezzlement	Public violence
Fraud and misappropriation of funds	Rape
Illegal possession of firearms	Robbery with aggravated circumstances
Ill treatment of children	

## XI. National Data

No national data are available yet.

## XII. Policy Implications and Application of Data

The I-ADAM pilot project will complement the existing Asian Multicity Epidemiology Network and the National Drug Information System. The I-ADAM project is unique because it will provide data on drug use among the arrestee population; the two existing programs provide data from the addict population. The data from this study will provide an indicator to policymakers of the extent of drug and alcohol use among those arrested for crimes. It is hoped that this study will be used and accepted as an indicator and, in the long run, will influence existing policy regarding drugs and crime.

### Notes

1. In Malaysia, substance abuse (known as "daddah" in Bahasa Malaysia) does not refer to alcohol abuse or dependency.
2. National Narcotics Agency, *National Narcotics Report*, Kuala Lumpur: Ministry of Home Affairs, 1998.
3. National Narcotics Agency, *National Drug Information System*, Kuala Lumpur: Ministry of Home Affairs, 2000.
4. Central Intelligence Agency, *The World Factbook: Malaysia*, Washington, DC: Central Intelligence Agency, 2000.
5. See Weibel, W.W., "Identifying and Gaining Access to Hidden Populations," in *The Collection and Interpretation of Data From Hidden Populations*, ed. E.Y. Lambert. NIDA Research Monograph 98. DHHS Publication No. (ADM) 90-1678. Rockville, MD: U.S. Department of Health and Human Services, National Institute on Drug Abuse, 1990.