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**ECONOMIC AND SOCIAL CONSEQUENCES OF CRIME:
NEW CHALLENGES FOR RESEARCH AND PLANNING**

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INTRODUCTION

1. That crime exacts a price in human and material terms is generally admitted. How sizable is this price? What are its elements, ramifications and repercussions on society as a whole and on the groups within it? The answers are still largely unknown. In order to deal with crime more effectively and to devise more successful preventive strategies, much more has to be known about the impact of crime on different segments of the population, on the economy, on national development and on the quality of life. The insights obtained may be crucial to future planning.

2. The past decade witnessed an interest, in different parts of the world, in developing some estimates of the "cost of crime". ^{1/} But there is as yet a dearth of techniques for measuring the impact of crime on economic and social development. This is a central issue that remains to be scientifically explored. The problem in the poorer countries is made all the more acute by the scarcity of available resources urgently needed to meet the competing demands of development. The indications that crime and crime control consume a significantly greater proportion of these scarce resources in the poorer countries than in the richer ones ^{2/} need to be systematically pursued for their policy and planning implications.

3. The parallel at the micro-level is striking. Just as poor countries pay relatively more for crime than their affluent counterparts, so - it appears - do the poor, marginal segments within countries pay a greater price than do the rich. Issues of equity and social justice combine with developmental concerns to compel meaningful investigation and action. The direction which these efforts might take and the ways in which they might be promoted are the paramount concerns of this paper.

4. The term "consequences" of crime implies a delay between event and repercussions. These may, however, be simultaneous. The law itself occasionally defines and penalizes crimes in terms of their consequences. The term "cost of crime", even when including social as well as economic aspects, is not favoured by those who feel that the focus seems too materialistic. To speak of the "effect" or the "impact" of crime in its multiple ramifications, including society's response to it, is perhaps more appropriate, suggesting the dynamics of the process.

^{1/} For example, Argentina, Austria, Brazil, Canada, France, Mexico, Poland, Uganda, United Kingdom, United States of America.

^{2/} In a sample of 25 countries, selected on the basis of readily available official data, the proportion of public operating expenditure budgeted for crime control ranges from less than 2 per cent to 16 per cent, with a median of 3 per cent in the budgets of the rich and developed, but of 9 per cent of the small budgets of poor and developing countries. See The Place of Criminal Justice in National Development Planning (United Nations publication, to be issued). The inclusion of directly or indirectly crime preventive services would raise these figures considerably higher.

5. While the concept of "crime", as used here, denotes forms of behaviour proscribed by criminal law, the relative fluidity of boundaries deriving from changing circumstances and a reassessment of the purview of the criminal law have led to a questioning of the apparent overreach of the law in the sphere of so-called "victimless crime", such as morals offences and drug-related offences, and its relative laxity or even inapplicability in others which may be more harmful to society (certain business and labour practices, pollution, consumer exploitation etc.).

6. As the distinction between crime and non-crime becomes increasingly blurred, so does the difference between offender and law-abiding citizen. Much behaviour falls along the borderline where identification and response depend largely on the type of activity, status of the individual engaging in it and differential reaction of the organs of control. "Crime" is, of course, a relative concept varying in time and place, which for its legal definition depends on the prevailing value system and power structure. In this sense, it is a socio-political and economic phenomenon. ^{3/} It may in turn affect the value system and structure by which it was defined. Thus, a mutual feedback is created which may eventually set off a chain reaction leading to conditions of change.

7. In describing the consequences of crime, one can proceed at a number of levels and in several directions. One can distinguish between economic and social, including psychological, consequences. This, in effect, is not a dichotomy but an operational means of facilitating analysis by dealing with two sides of the coin. There are, however, other juxtapositions. One may, for example, speak of direct and indirect side-effects; immediate and long-range or ultimate consequences; visible and hidden costs; macro-effects and micro-effects; public and private costs; material costs and intangibles, such as the psycho-social climate, which may be difficult to concretize and even more difficult to quantify.

8. Moreover, the question may be asked: consequences for whom or for what? For the individual or for society at large? For the victim or the offender or both and including their families? For the economy or life-style of the population? For the rate of crime or the operation of the agents of control? The focus will evidently vary according to viewer and perspective, and what may seem harmful to one may seem tolerable or even beneficial to another.

^{3/} This point has been emphasized in recent analyses of crime problems. See, for example, Manuel López-Rey, Crime: an Analytical Appraisal (New York, Praeger, 1970); S. C. Versele, "La violence institutionalisée", Report presented to the Twenty-third International Course of Criminology, Maracaibo, Venezuela, 28 July-3 August 1974; and Ian Taylor and others, The New Criminology: For a Social Theory of Deviance (London, Routledge and Kegan Paul, 1973).

I. SOME ECONOMIC AND SOCIAL CONSEQUENCES OF CRIME

A. Economic consequences

9. To begin with that which seems to be most visible and measurable, one may want to consider the economic impact of crime - both as a process and as a reaction to it.

1. Some figures on the cost of crime

10. Recent estimates of the cost of crime computed in several countries are staggering. In the United States of America the total cost of crime for 1974 has been put at \$88.6 billion as compared with \$51 billion in 1970. The breakdown is as follows: ^{4/}

<u>Cost of crime</u>	<u>Organized crime</u>	<u>Billions of dollars</u>
Total take by organized crime from illegal goods and services	Gambling Narcotics Hijacked goods Interest from loan sharking	30.0 5.2 1.5 0.5
\$37.2 billion		
Crimes against property and business	Embezzlement, fraud, forgery Kickbacks paid by businesses Unreported business thefts Robbery, burglary, theft, shoplifting Vandalism, arson	7.0 5.0 5.0 3.0 1.3
\$21.3 billion		
Other crimes	Homicides, assaults (loss of earnings, medical costs) Drunken driving (wage loss, medical costs of victims, property damage)	3.0 6.5
\$9.5 billion		
Criminal justice system	Police (federal, state, local) Penal system Court system	8.6 3.2 2.8
\$14.6 billion		
Private crime-fighting costs	Total crime cost	88.6
\$6.0 billion		

^{4/} U.S. News and World Report, special section on "The losing battle against crime in America", prepared by the Economic Unit, 16 December 1974. Other estimates, for example of white-collar crime, range from \$40 to \$200 billion. See Chamber of Commerce of the United States of America, A Handbook on White-Collar Crime: Everyone's Problem, Everyone's Loss (Washington, D.C., 1974).

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A recent report issued in the United States of America points out that "the economic impact of crime hits everybody, in every class of society and in all parts of the country. In addition to personal losses suffered by the victims, crime adds to the price of almost everything people use, either directly or indirectly. And it hikes tax bills." The estimate is that the crime bill averages about \$420 per year for every person in the United States. ^{5/} While crimes of violence tend to dominate the headlines and provoke fear, organized crime and crimes against business and property (white-collar crime) account for most of the huge and still soaring cost.

11. In Canada the Government has on occasion lost considerable revenue when it has supported projects to develop rural regions without adequate previous investigation, thereby unwittingly affording unscrupulous individuals the opportunity to commit large-scale fraud (amounting, in the case of one American promoter, to \$30 million). ^{6/} As a result, stricter controls have been instituted. In Canada, also, there has been a sustained interest in assessing the economic and social cost of crime, as evidenced in meetings ^{7/} and studies on this subject. ^{8/}

12. In many areas of the world, while violence, particularly indiscriminate violence, is increasing, creating a climate of insecurity and fear, the major impact is caused by economic crimes. The widening extent of these offences and the increasing inventiveness of their perpetrators are causing growing concern in countries at different points of the development continuum. Varying attitudes towards different kinds of offences affect their prevalence. In Italy, the cost of tax evasion has been estimated by the Finance Ministry at \$5 billion - a sum equal to the amount to be raised through a series of governmental austerity measures. Some \$50 billion a year, three times the amount Italy has borrowed abroad to meet her indebtedness, are reported to have been taken out of the country illegally and deposited in Swiss banks. ^{9/} In France, where tax evasion and bribery are also regarded relatively lightly, losses attributable to these offences are estimated to

^{5/} U.S. News and World Report, op. cit., p. 32. Obviously, averages of this kind are not really meaningful, since there is a differential impact on different segments of society and individuals. This issue is taken up in greater detail in the section dealing with the distribution of the costs of crime.

^{6/} Patrick G. Ryan, "Can white-collar crime affect the economy?" (Toronto, Carleton University, 1972).

^{7/} See, for example, Canada, Department of the Solicitor General, The Cost of Crime and Crime Control: Analysis of the Work of the Second International Symposium in Comparative Criminology (Ottawa, 1971).

^{8/} See, for example, Robert G. Hann, "Crime and the cost of crime: an economic approach", Journal of Research in Crime and Delinquency, vol. 9, No. 1 (January 1972), pp. 12-30; and Robert Evans, "Financial cost of crime in Canada", Research proposal submitted to the Canadian Social Welfare Council (Ottawa, 1973).

^{9/} Fred Ferretti, "Crime, a heavy tax on economies old and new", New York Times Business and Financial Supplement, 26 January 1975, p. 72.

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run into millions of dollars each year. 10/ Pilferage and robbery have increased so rapidly that, according to one major Paris insurer, insurance policies against robberies might be discontinued if the rate does not abate. Many companies are refusing insurance on country homes. Armed robbery has increased to the extent that many banks and investment firms have installed electronically operated doors. The convocation of a series of meetings on the subject of crimes against the economy reflects the rising concern about the problem. 11/

13. Although the over-all trend of crime in Japan has been downward, some offences and certain offences in some areas have been increasing, and there has been an attendant shift in emphasis. While in some circles white-collar offences have been accepted as a way (albeit illegal) of doing business, there is growing concern with increased traffic offences, petty pilferages and rising criminality among women. The total loss suffered by victims of robbery, extortion, theft, fraud and embezzlement in Japan in 1972 was 82,789 million yen (about \$306,630,000), the amount of damage being largest in the case of theft (53 per cent of the total) and presumed to be substantial in the case of traffic accidents. It was calculated in a study of the 1971 expenditure on crime control that the sum of 630,653 million yen (\$2,335,700,000) or 3.8 per cent of the aggregate State budget and 0.8 per cent of the gross national product was spent on the police (82.7 per cent), prosecutors (3.4 per cent), courts (4.8 per cent), corrections (6.6 per cent), and rehabilitation (0.6 per cent). Thus, the total amount more than quadrupled over the decade. The budget for juvenile delinquency services is also increasing, amounting to some 13 billion yen (\$48 million) in 1972. 12/ In Malaysia, 7.62 per cent of the national budget (the equivalent of \$349,380,417) has been set aside for the maintenance of law and order (\$304,298,000 for the police; \$9,960,788 for the courts; \$22,500,975 for prisons; and \$12,620,654 for appropriate welfare services). These figures do not include expenditures for customs, immigration control and other law enforcement agencies which help to detect and curb crime. 13/

14. Jamaican authorities estimate that the well-publicized violence which preceded the establishment of the "gun court" (summary trials and indefinite

10/ Ibid.

11/ See, for example, "Le monde des affaires et sa délinquance", Report of the Twenty-fourth French Congress of Criminology, Limoges, 10-12 October 1974.

12/ Statement submitted by the host Government to the Asian Regional Preparatory Meeting of Experts on the Prevention of Crime and the Treatment of Offenders, Tokyo, 16-21 July 1973; see also the report on the Meeting (A/CONF.56/BP/3), p. 16.

13/ Adnan Haji Abdullah, "Estimating the costs of crime: new challenges for planning and research", paper submitted to the Asian Regional Preparatory Meeting of Experts on the Prevention of Crime and the Treatment of Offenders, Tokyo, 16-21 July 1973, p. 3.

detention for anyone possessing a firearm) has in the past five years cost Jamaica \$150 million in lost tourism income. ^{14/} In Ecuador, according to the statistics, the administrative machinery concerned with the prevention of organized crime was absorbing nearly 60 per cent of the total expenditures allocated for crime control. ^{15/} A study conducted in Mexico showed that homicides cost the State 30 thousand million pesos a year (including vehicular homicide). ^{16/} Expenditures on the agencies of law and order range from 7 to 10 per cent of recurrent expenditures in the Dominican Republic and in El Salvador. The Latin American meetings of experts held in preparation for the last two United Nations Congresses on the Prevention of Crime and the Treatment of Offenders were especially concerned about increase in administrative fraud and white-collar crime that pointed to deviations of a criminological type not only among the disadvantaged but also "in the classes wielding great social and economic power". ^{17/}

15. These figures, arbitrarily chosen and reflecting the situation in widely divergent countries, are of course oversimplifications: the aggregate of disparate elements covering only recorded crime cannot possibly produce valid totals. The inadequacy of this exercise and alternative possibilities will be dealt with later on in the methodological part of this paper. Nor is it intended here to use monetary estimates in themselves as criteria of the harm involved. It is recognized that crime-inflicted damage and human suffering cannot be measured in material terms; that often they threaten not only the security of individuals but the whole social fabric and public well-being. Such estimates, however, may give some idea of the burden that certain kinds of social disruption impose. It has been said that the levels and changes in crime within a society are indicators of that society's viability. The level of the financial costs involved and the amount of resources consumed in crime control may - like body temperature - reflect the society's state of health.

2. Some "gains" from crime

16. Not all kinds of criminal acts represent financial losses. Non-violent theft, while causing loss for the victim, involves merely a transfer of property. It may even be argued with Robin Hood that stealing from the rich is a legitimate way of redistributing income and that it promotes business by creating a need for the

^{14/} Report of the Conference on Crime Prevention in the Commonwealth Caribbean, 5-11 January 1975 (BP/UN/RLA-72-091/1).

^{15/} "Report of the Latin American Preparatory Meeting of Experts on the Prevention of Crime and the Treatment of Offenders", (A/CONF.56/BP/2), p. 20

^{16/} Alfonso Quiroz Cuarón and Raul Quiroz Cuarón, "El costo social del delito en México", *Criminalia*, vol. XXXVI, No. 7 (July 1970), pp. 431-535, and No. 8 (August 1970).

^{17/} A/CONF.43/RM.3, p. 6.

replacement of stolen goods. Certain individuals and groups profit from crime. ^{18/} Criminal enterprises, such as illegal gambling and traffic in persons and narcotics, enormously enrich the suppliers of the services and goods for which there is a market. Whether the demand creates the supply or the supply is geared toward stimulating a demand is a moot question. Regardless of the social utility or disutility of such activities, their profitability to those engaged in them is apparently sufficiently high to warrant the associated risk-taking. Because of the relatively low detection and clearance rates, the latter may be too small in comparisons with the profits involved to serve as an effective deterrent. The economists' theory of a rational "calculus" of risks and potential gains by prospective offenders is probably more applicable in the provision of illicit goods and services than in any other area, except in such white-collar crimes as fraud and currency offences where calculated risk is an inherent element.

17. It has also been argued that crime supports the entire "anti-crime industry", ranging from agents of the system to the suppliers of protection devices and insurance. Moreover, it has been pointed out that certain traits such as aggressiveness and propensity to risk-taking, which impel some individuals towards crime, are the very same traits as those which are highly prized in a frontier culture ^{19/} and that the distinction between legitimate development activities and exploitation is often blurred. Widespread corruption has been deemed by some analysts to actively promote development, ^{20/} though this point of view has been challenged by others. ^{21/}

3. Some losses

18. On balance, the losses from crime far exceed the gains, and even the latter most often represent illusory gains or gains to those who least deserve them. What are some of the more obvious negative economic consequences of crime? First

^{18/} Estimates of criminal "salaries" in the United States of America range from \$15,000 for a shoplifter ("booster") to \$165,000 for a drug importer, in each case tax-free. Organized crime can net many times these amounts. See, for example, Thomas Plate, Crime Pays! (New York, Simon and Schuster, 1975), p. 92.

^{19/} "Social defence policies in relation to development planning", Working paper prepared for the Fourth United Nations Congress on the Prevention of Crime and the Treatment of Offenders, Kyoto, Japan, 17-26 August 1970 (A/CONF.43/1).

^{20/} J. S. Nye, "Corruption and political development: a cost-benefit analysis" American Political Science Review, vol. LXI, No. 2 (June 1967), pp. 617-627.

^{21/} Gunnar Myrdal, Asian Drama: an Inquiry into the Poverty of Nations (New York Twentieth Century Fund, 1968); and Edward C. Banfield, Corruption as a Feature of Governmental Organization (New York, National Bureau of Economic Research, 1975), p. 23.

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of all, there are the material losses inflicted on individuals and/or the community by the removal or outright destruction of property, which is an element in many crimes (for example, vandalism and arson). Though some property losses may represent transfer costs, the outcome is generally not to the public good. Losses to insurance companies lead to increased premiums. Expenditures on services for crime prevention and control are met by higher taxes on the citizenry and divert limited resources from other pressing needs. Certain kinds of crime (for example, hijackings, armed robbery and pilferage) restrict the mobility of persons and commodities, 22/ in so far as they cause preventive measures to be taken, and greatly increase operating expenses and eventual costs to the consumer (for example, rising air fares have resulted partially from the need for security measures). Others (for example, illicit monopolies and anti-trust violations) may restrict the number of producers or consumers in an industry by using predatory tactics. Economic crimes, such as collusive price-fixing, fraud, misrepresentation, or adulteration of drugs and food products and other forms of consumer exploitation, victimize the public and often impose additional hardships on those least able to afford them.

19. Crimes against the economy comprise a large part of the "dark number" of unreported or underreported crime. Such crimes appear to place a far heavier burden on economic and social institutions and on the public than the small number of successfully prosecuted cases seems to indicate, particularly by setting off chain reactions. Theft or embezzlement of valuable property may provoke further, still greater material damage by stopping production, wasting raw materials, machines etc. Such losses, being cumulative, may not be clearly apparent (or measurable) in the short run, but may in their repercussions interfere with development planning goals and strategies. For example, massive consumer fraud, by transferring money from the many to the few may cause a special secondary distribution of income utilized for consumption, which in turn affects the over-all income distribution. 23/ While expenditures on crime control are increasing in most countries (not necessarily with a commensurate effect), the hidden, indirect, dangerous, long-term social and economic consequences of crime are increasing to an even greater extent.

22/ See, for example, United States of America, Ninety-first Congress, second session and Ninety-second Congress, first session, Senate, Select Committee on Small Business, Impact of Crime on Small Business, 1970-1971 Hearings, part 3, Cargo Theft, Trucking Industry (Washington, D.C., 1971).

23/ See Leszek Lernell, "Ekonomiczne Koszty Przestępcstwa" /The economic cost of crime/, in Zarys Kriminologii Ogólnej /Outline of General Criminology/ (Warsaw, Państwowe Wydawnictwo Naukowe, 1973). In the mid-1960s one of the largest financial institutions in Canada collapsed because of criminal fraud. The collapse affected confidence in the financial market. The impact of this collapse on markets cannot be measured exactly; it is not unreasonable, however, to state that this crime may have caused the increase in interest rates in the country by one-half percentage point, as well as having other kinds of backlash effects on legitimate businesses and private investors. If so, the cost of this particular crime was enormous. See Patrick G. Ryan, op. cit.

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20. Crimes against the economy are apt to increase with development, in the absence of legal safeguards or other countermeasures against them. The damage caused by the flight of capital, smuggling, illegal systems of handling labour, currency manipulation, tax evasion and transfer pricing may be appreciably greater than that caused by other forms of crime and may result in public victimization. The relative impact of different kinds of crime on the economy and national development remains to be assessed. While nationally based crime is an element in transnational crime, the latter's effect on individual countries and on the world scene merits urgent investigation. Measures to control and limit transnational economic and other kinds of crimes have to be predicated on an analysis of the various factors involved, including the linkage between the national and international situation. Such an analysis must deal inter alia with the activities of multinational corporations and other powerful trading partners that have monopolistic capacities. There is a need for an adequate data base that would reveal the full range of consequences of certain practices which tend to result in the illicit transfer of capital from the poor to the rich countries. Such data would permit more informed and appropriate measures to be taken for the prevention and control of economic abuses. Recent United Nations initiatives should contribute substantially in this effort.

21. Multipronged action is also required in other areas. The long-term effects of corruption can be particularly debilitating. The Committee on Crime Prevention and Control at its third session, held at Geneva, 24 September-3 October 1974, singled out corruption as a prevalent phenomenon spreading in many parts of the world, invading the political and economic sectors. Corruption tends ultimately to foster inertia and inefficiency, slowing down the movement towards modernization. Thus, costly delays may result from expectations of "speed money", and the entire system may be undermined. Corruption feeds on official venality and tends to have a reciprocal relationship with other illicit activities such as organized crime. Transnational economic criminality also generates and reinforces the corruption of politicians and administrators, making the task of repressing it even more formidable. 24/

22. Though organized crime may initially satisfy a market demand, it exacts a far greater economic cost than is superficially apparent. Activities such as illegal gambling deprive legitimate business of income or capital while enriching and strengthening organized criminals who provide the illicit goods and services. Racketeering and other forms of organized fraud levy a kind of "tax" which, while it may well result in the stimulation of the market through purchase of legitimate articles with ill-gotten gains, is ultimately passed on to non-criminal victims.

24/ See E/CN.5/516, p. 7. Bribery is regarded as a not inconsiderable part of the total cost even of "legitimate" business operations in some areas, and even international aid has often been dissipated in large-scale corruption. See, for example, G. Myrdal, op. cit., p. 946; M. López-Rey, "The expansion and distribution of crime: corruption", in Crime: an Analytical Appraisal (New York, Praeger, 1973); and M. B. Clinard and D. J. Abbott, Crime in Developing Countries (New York, Wiley, 1973).

These kinds of activities also represent a loss to the Government in legitimate revenues which could be used to increase social welfare. 25/ Furthermore, they are self-propagating. Black markets, for example, often provide the base for underworld business operators who are capable of branching out into other lines. 26/ Permeation of legitimate enterprises by coercion or other means represents a considerable danger, as do various forms of linkage with such licit business operations as those conducted by banks. The adoption of complex organizational forms and management techniques has helped organized crime to interact with legitimate business operations and, thus, to consolidate its gains and power. It has also helped organized crime to transcend national boundaries and increasingly to internationalize itself. 27/

23. Crimes against persons, particularly those involving violence, may cause loss of life or bodily harm and have a traumatic effect. The consequences for victims and their families in terms of human suffering and associated material costs are enormous. The fear of crime derives primarily from fear of violent crime, and in some countries the risk is increasing. It not only has an insidious effect on the social climate but also influences ecological patterns, real estate values, business locations and so on. The fear of street crime may cause people to shun restaurants, shops and recreational facilities, particularly after dark, resulting in losses of revenue and diminished incentives for the establishment of new facilities. Forms of transnational crime involving violence may discourage investment and increase operating expenses of foreign companies which may have to offer extra inducements to personnel employed in dangerous areas, pay higher insurance premiums, and provide more costly security measures. The increased costs are usually passed on to distributors or retailers and ultimately to the public at large.

24. One of the better researched areas of crime is that of traffic offences, which could be handled more effectively in the light of the available data. Studies revealing the correlation between patterns of vehicular homicide and patterns of other crimes, especially urban crimes of violence, 28/ render suspect

25/ A recent study of organized crime in the United States community revealed a steady pattern of growth leading to a situation where legitimate government was being systematically "out-taxed" by criminal elements. See Harold D. Lasswell and others, The Impact of Organized Crime on an Inner City Community (New York, Policy Sciences Center, 1972), p. 238.

26/ See Thomas C. Schelling, "Economic Analysis and organized crime", in United States of America, President's Commission on Law Enforcement and Administration of Justice, Task Force Report: Organized Crime (Washington, D.C., 1967), pp. 114-126.

27/ See Esbjörn Esbjörnsson, "International criminality in Sweden", Scandinavian Studies in Criminology, vol. 5 (Oslo, Universitetsförlaget, 1974), pp. 11-23.

28/ Raymond J. Michalowski, "Violence on the road: the crime of vehicular homicide", Journal of Research in Crime and Delinquency, vol. 12, No. 1 (January 1975), pp. 30-43.

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the tendency to treat traffic offences primarily as crimes of negligence. The relationship between traffic accidents and alcohol (or other) drug consumption has led some countries to adopt regulatory procedures. 29/ The large number of traffic accidents, the loss of life, injury and damage involved merit special attention. According to the World Health Organization there are 250,000 deaths on the road each year, and more than 10 million people are injured. 30/ Most accidents of course occur in developed countries where car ownership is common. In the United States of America alone, a country which among developed countries has one of the lowest highway fatality rates, almost 2 million persons have died in automobile accidents since statistics have been compiled, many of these attributable to criminally negligent traffic behaviour. Some 2 million persons are injured annually, many severely. 31/ In developing countries, the picture is even more frightening. 32/ Traffic accidents account for some 200,000 deaths a year in Latin America. 33/ Further in-depth research is required in this entire area to isolate subjective as well as objective factors that contribute to the accident process, so that traffic accidents which absorb so much of law enforcement time and effort would become more predictable and therefore more preventable.

25. The sizable cost of other kinds of accidents and associated offences of negligence equally merits attention. The recent focus on the human environment has underlined the extent of ecological damage, including the harmful effects of pollution, carcinogenic substances (whether at places of work or in food

29/ For example, the Scandinavian countries and the United Kingdom. See H. Laurence Ross, "Law, science and accidents: the British Road Safety Act of 1967", Journal of Legal Studies, vol. II (1) (January 1973), pp. 1-78.

30/ WHO Chronicle, vol. 27 (July/August 1973), p. 292.

31/ The cost of traffic accidents for one year (1973) has been estimated at over \$20 billion, including lost wages, medical fees, hospital expenses, insurance claim settlement costs and property damage (figures provided by the Automobile Association of America). In Europe the loss from traffic accidents per annum has amounted to about 1 per cent of the aggregate national revenue of the region.

32/ The percentage of persons killed in 1972 per 100 million vehicle-kilometres was 4 in Denmark and Norway, 3.4 in the United Kingdom, 4.2 in Canada, 2.70 in the United States of America and 66 in Ethiopia, 85 in Upper Volta, 77 in Zambia, 3.8 in Australia. International Road Federation World Road Statistics 1969-1973, (Geneva/Washington, D.C., 1974). In Thailand, automobile accident costs (as reflected in third party liability) increased from 76 million baht in 1972 to 120 million in 1973. In India, if the present trend continues, over 42,000 traffic deaths are forecast for 1980. See International Insurance Monitor (New York, July 1974).

33/ A/CONF.56/BP.2, p. 21.

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additives), dangerous medication (which may result in birth defects), occupational accidents and the like. ^{34/} Only isolated figures exist, but the extent of damage incurred and the need for preventive measures have already elicited considerable attention and demand international as well as national action. The International Labour Organisation and World Health Organization have dealt with some of these aspects (the International Labour Organisation in promoting standards for occupational safety), and the United Nations Environment Programme and Conference - Exposition on Human Settlements (HABITAT), to be held at Vancouver in 1976, will take up still others. Concerted action, envisaged in the United Nations framework, is required and could greatly profit from a criminological input.

26. The time has come for a review of the emphasis and priorities which have characterized the attitudes regarding different kinds of crime. The emphasis on street crime has overshadowed the urgency of adopting effective measures against far-reaching kinds of criminality that have the widest impact. With advances in science and technology, this impact can be multiplied manifold, affecting both increasing numbers of people and economic and social processes. For example, the introduction of computers into business operations, public services and utilities and other aspects of daily life, though originally expected to reduce crime by imposing machine-made controls, has instead provided scope for sophisticated fraud and manipulation involving very large sums and affecting thousands of people. ^{35/} The change-over to a credit economy, far from cutting cash losses, has provided opportunities for illicit credit operations, including credit card fraud and insurance and securities fraud on a vast scale. Fraudulent bankruptcies and other illicit schemes preserving the appearance of legitimacy have a multiplier effect. Advances in management techniques applied to crime control have not been able to keep pace with the efficiency and ingenuity of criminal organizations. The potential deriving from the use of atomic and other modern tools for destruction by criminal elements represents a realistic threat. ^{36/} The possibility of nuclear theft and misuse by organized criminal groups has recently been carefully analysed in an effort to devise preventive and control strategies. ^{37/} There

^{34/} See A. V. Roshchin, "Protection of the working environment", International Labour Review, vol. 110, No. 3 (September 1974), pp. 235-249. It is estimated that in the United States of America alone 2 million workers annually suffer injuries in industrial accidents, with the number increasing.

^{35/} The loss from the criminal misuse of computer systems has been as high as 5 million dollars per incident.

^{36/} One of the largest computer crime schemes discovered has been "equity funding". This and other abuses have led to proposals for measures to prevent or control them. See R. G. Stephen, W. Leitholz and Louis D. Wilson, User's Guide to Computer Crime: Its Commission, Retention and Prevention (Radnor, Pennsylvania, Chelton Book Company, 1975), p. 216.

^{37/} See Mason Willrich and Theodore B. Taylor, Nuclear Theft: Risks and Safeguards (Cambridge, Massachusetts, Ballinger, 1974).

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is obviously a need for a reassessment and revitalization of initiatives that go beyond the piecemeal and often half-hearted attempts made against individual and individualistic manifestations of crime. This requires a reordering of priorities in terms of the real and not merely the apparent impact of crime.

4. Dissipation of human and material resources: some effects of crime control policies

27. A considerable portion of the cost of crime is attributable to expenditures on crime prevention and control. Of these, the expenditures on prisons and the police are the most costly. Putting aside for the moment the methodological considerations connected with computing these costs, the question of their most rational deployment may be raised, with particular emphasis on those countries where competing demands on limited resources impose special constraints.

28. A country's most valuable asset is its human capital. Yet present-day practices for the treatment of offenders often run counter to the rational principles of manpower utilization and conservation. Protracted incarceration not only impairs the prisoner's earning capacity during his sentence but generally handicaps his employment prospects for the future, fostering the perpetuation of a criminal career. Families of prisoners, deprived of means of support, often become wards of the State. Work done during periods of confinement rarely takes account of market conditions and is even more rarely integrated with the wider needs of the economy and of national development. In view of the sizable prison populations in many countries, the total social and individual losses may be enormous.

29. The wisdom of large investments in expensive maximum-security institutions is increasingly being questioned, particularly in the light of their relatively poor performance as a long-range means of treating offenders and deterring crime. In one country, a moratorium on new prison construction has been proposed and progressive policy statements have called for the utilization of other options for non-dangerous offenders. ^{38/} Appropriations for costly institutional systems could instead be transferred to innovative community programmes offering greater promise, particularly since the comparative success rates of institutional and non-institutional treatment do not correspond to the relative size of the investments made. ^{39/} Where, for the present, segregation seems unavoidable, ways of defraying expenditures by providing productive work for offenders need to be

^{38/} See, for example, United States of America, National Advisory Commission on Criminal Justice Standards and Goals: Corrections (Washington, D.C., 1973); and National Council on Crime and Delinquency, "The non-dangerous offender should not be imprisoned: a policy statement", Crime and Delinquency, vol. 19, No. 4, (October 1973).

^{39/} It is estimated that the cost of institutionalizing an adult in a state facility is approximately 6 times that of parole and 14 times that of probation. See Allan R. Coffey, The Prevention of Crime and Delinquency (Englewood Cliffs, New Jersey, Prentice-Hall, 1975), p. 186.

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explored and implemented. Successful instances of this kind of management exist in a number of countries and the gain to offenders' self-respect as well as to the budget could prove rewarding.

30. Quantitative increases of expenditures on the police - the instinctive reaction to proliferating crime - may be inappropriate and in fact counterproductive. This is particularly true if there is no balancing of investments in the different subsectors of the criminal justice system, in the absence of a comprehensive policy which takes adequate account of their interdependence. Official statistics indicate that in at least one developing country the budget appropriation for internal order exceeds that for education and health combined, while in at least one such country more workers are employed in social defence than in education. ^{40/} Moreover, the amount of crime in any society is never known. In fact, it has been suggested that reported crime may constitute no more than 10-15 per cent of the total. This being so, there are substantial costs which will remain hidden. It also means that those apprehended are in effect carrying the burden of a much wider segment of the population. It must be considered, however, that for many types of crime those ultimately apprehended have also been the perpetrators of many previously committed "hidden" offences. Thus, the "average" burglar gets apprehended for only one of a number of offences.

31. To all this must be added the loss of life caused by crime, the loss of man-hours absorbed by proceedings against crime, the physical damage to victims and police officers, the destruction, abuse of or damage to property and the waste of resources in additional security work, in overcrowded prisons and in potentially productive lives misdirected. The insecurity of living in a modern city has enormous significance not only in terms of the large amounts spent on protection but also in its profound effect upon the total production in a community. This cost is probably far larger than can be imagined; speculation needs to give way to scientific studies of differences in productivity between people living in relative security and those subjected to excessive risks of victimization or apprehension about it. The inequitable enjoyment of the fruits of development by the unscrupulous reduces the motivation of others to engage in honest hard work. But the effect of widespread crime on families and children and on the emotional and moral climate probably costs more in the long run than all the other consequences combined.

B. Social consequences

32. While the material costs of crime, particularly of certain kinds of crimes, and of society's reaction may be substantial for both individuals and the national

^{40/} The Place of Criminal Justice in National Development Planning (United Nations publication, to be issued). Crime prevention workers were included here only if identifiable in plans - for example, police, courts, probation and prisons. It will be appreciated, however, that in a developing country these may constitute a sizable proportion of civil servants, not even counting those more indirectly involved in health, education and welfare services.

economy, the social costs, which cannot be calculated in money, are higher still. Personal loss or injury threatens the element of inviolability basic to civilized life. Freedom from want may become all but meaningless if not accompanied by freedom from fear, and crime breeds fear. It also breeds social divisiveness, disinvolvement, ^{41/} estrangement and conflict and is, in turn, fostered by them. The failure to meet public expectations of equitable and effective justice, together with the corroding effects of crime, affect the moral climate and tend to foster a feeling of impotence and insecurity. The participatory role of people in their Government tends to be further reduced, anomie manifestations increase, social cohesion may be weakened, polarization accentuated and national unity impaired. The relativity with which conduct - including criminal conduct - may be viewed (also by offenders who may regard themselves as victims of the system and thus justified in violating its laws), the oscillation between repression and permissiveness, the heterogeneity and relative fluidity of values and norms, all these contribute to an atmosphere of instability and uneasiness which itself promotes deviant behaviour. Countries have usually made their choices in tolerating a certain measure of social disorganization as a necessary stage of development and modernization. The problem lies, rather, in excessive levels of social disruption which, if they become self-perpetuating, may undermine the course of development and nullify some of its hard-won gains. No estimates of economic costs can obliterate the fact that human life, health, freedom and dignity have a priceless intrinsic worth.

33. The severity of the sanctions employed generally mirrors these values. Each society must and does decide which crimes it considers most serious and how the scale ranges, though certain basic rankings recur throughout different cultures (for example seriousness of homicide). Even then, however, there is a range of variability (the taking of a human life is deemed more heinous in some societies than in others). The legal order of different societies reflects the prevailing values, or rather the values prevailing among the dominant groups in that society, but the extent of its observance tends to reflect its consonance or dissonance with the values of the majority or of particular groups. The latter may in itself be an indication of a social lag between the law and changed social reality and a precursor to change. Furthermore, societies vary in the amount of deviance they tolerate, ranging from strictly "law and order" systems, to permissive societies where the controls are expected to be socially or individually built in. Changing levels of tolerance to deviance may be a reflection both of changing social norms and of the essential dysfunctionality of existing systems.

1. The fear of crime

34. One of the most virulent consequences of crime is fear, based more frequently on subjective perception of potential threat ("felt danger") than on fact. Fear

^{41/} Recent existentialist approaches to crime and other forms of deviance link the disengagement prevalent in contemporary societies to the breakdown of values involvement ("accidia"). See S. Giora Shoham, Society and the Absurd (New York, Springer, 1974).

creates protective and often over-protective reactions which, in turn, may sustain the fear. Some urban areas resemble fortresses of old, with homes doubly or triply secured and few people venturing into the streets at night. While this process may increase security to some extent, it also increases the already existing fear. The loss of mutual trust and the increased social distance which result destroy the social interaction and solidarity essential to a viable, secure society. The violence associated with certain kinds of crime does much to create fear, even though these crimes are frequently less common than the public believes, allowing for increased risks in "high crime areas".

35. Figures compiled in one country show the risk of death at the hand of strangers to be less than one third that of death by falling, and about one eleventh that of death from automobile accidents. In a single year, accidents in homes throughout the world caused close to 24 million injuries, 4 million of which resulted in either temporary or permanent disabilities, as compared with some 100,000 from robberies. ^{42/} Even allowing for considerable under-reporting, large differentials persist. Yet people do not manifest fear of traffic or home accidents, while believing that victimization from crime is not only possible but imminent. Recent experimental studies on fear suggest that the degree of fear felt about a potentially harmful event may derive not from the probability of its materializing, nor from the degree of injury but primarily from the quality of the event or of the situation itself. ^{43/}

36. Certain external threats evoke far more fear than others. Most people find the idea of being injured in a violent encounter more frightening than that of being hurt in a traffic accident. The unpredictability of possible danger and the growing incidence of offences of violence have tended to increase fear. Continuous uncertainty leads to chronic anxiety, tension and stress. Protracted reactions of stress are damaging to physical and mental health; socially, chronic stress tends to produce increased aggressiveness and/or withdrawal (in different forms, including drug use) and the breakdown of interpersonal communication and subsequent alienation. ^{44/} Lack of confidence in the effectiveness of public instruments of control and the publicity given to violent crimes compound the

^{42/} United States of America, President's Commission on Law Enforcement and Administration of Justice, Task Force Report: Crime and Its Impact; An Assessment (Washington, D.C., 1967).

^{43/} M. Scarf, "The anatomy of fear", New York Times Magazine, 16 June 1974, p. 10.

^{44/} Hans Selye, The Stress of Life (New York, McGraw-Hill, 1956); B. S. Dohrenwend and B. P. Dohrenwend, Stressful Life Events: Their Nature and Effects (New York, Wiley, 1974); and R. F. Geyer, "Alienation and stress: a review of their modern forms from the perspective of general systems theory". Paper presented to session entitled, "Stress: Psychological and Physiological Factors" of the Annual Meeting of the Society for General Systems Research, New York, 27-30 January 1975, (Amsterdam, Netherlands Universities Joint Social Research Centre).

problem by increasing in individuals and the community a feeling of helplessness and of fear. The fear of crime itself can be manipulated for political purposes, including vote-getting and the passage of hard-line legislation which may only exacerbate the problem at hand. References to "crime waves" can be held suspect for this very reason. On the other hand, the subjective perception of the hardship inflicted by crime may be a good indication of the psychological (as well as real) victimization it causes. ^{45/} Indicators of subjective reactions to crime must thus supplement objective measures to assess its full impact.

2. Victims and victimizers

37. The administration of justice all too often leaves the victim of crime a forgotten person. The declared and latent objectives of the prevailing systems - rehabilitation, punishment and deterrence - pit the State against the offender with little emphasis on the situation of the victim. Restitution, a cardinal principle of indigenous systems of customary justice in most developing countries, has only relatively recently found an echo in some of the developed ones, as witnessed by the attempt of a number of States to include in their national legislation provisions for compensation to victims of crimes. Recent international conferences have also focused on this question, ^{46/} but the practice is still innovative and subject to controversy. Present arrangements for compensation to victims of crimes, even where they do exist, do not serve rehabilitative and other correctional purposes and tend to offer only token restitution. ^{47/} Even if victims know that relief can be sought, many may be intimidated by bureaucratic difficulties. Moreover, it is doubtful that symbolic reimbursement can compensate even partially for the pain and suffering experienced by victims and/or their families, particularly in the absence of the community's sympathy and concern. In the case of collective harm there is usually no redress.

38. Violence aimed - often indiscriminately - at innocent civilians has aroused increasing attention but little productive action. The relative impunity with which such acts have been perpetrated has reinforced their usage, and the apparent helplessness of both victims and authorities to threats to life has served to

^{45/} Recent legal decisions have recognized the fear of personal harm as sufficient cause for not commuting to work and for collecting unemployment insurance benefits. See New York Times, 5 June 1975, p. 41.

^{46/} See, for example, I. Drapkin and E. Viano, eds., Victimology: a New Focus, Report of the International Symposium on Victimology, Jerusalem, 2-6 September 1973 (Lexington, Mass., Lexington Books, 1974).

^{47/} For an analysis of the different victim compensation schemes, see Stephen Schafer, The Victim and his Criminal (New York: Random House, 1968); J. van Bemmelen, "Compensation to victims of crime", Report presented to the Eleventh International Congress on Penal Law, Budapest, 9-15 September 1974; and Lola Aniyar de Castro, La victimología (Maracaibo, Venezuela, Centro de Investigaciones Criminológicas de la Universidad de Zulia, 1969).

perpetuate the pattern. It tends to be reinforced by processes such as authorization, legitimization, rationalization, routinization and dehumanization which help to overcome ethical scruples and the feeling of empathy with one's fellow men. 48/ The direction of violence at the defenceless who have not engaged in violence against the victimizers, seems to be a salient feature, and the process is becoming increasingly randomized. 49/ A kind of psychic numbing seems to be taking place, 50/ dehumanizing both victim and victimizer, weakening moral restraints and brutalizing in the process. The loss of community and empathy which help men to recognize each other's humanity and uniqueness acts as both cause and effect.

3. Distribution of the costs of crime: some issues of equity

39. Even a cursory glance at the "topography" of costs of crime reveals that they are usually not distributed evenly within the societies where crime occurs. The most deprived and vulnerable segments of the population often bear the heaviest burden and even in other respects equity seldom prevails. This uneven distribution of the consequences of crime contradicts the declared aim of most societies of diminishing inequality and promoting social justice, and it compounds crime problems where they exist.

40. The powerless, the poor, the old and the undereducated are far easier targets for both sophisticated offences and ordinary street crime than their more fortunate compatriots. This has been reflected strikingly in some of the "victimization" studies carried out in recent years. One survey, carried out in the United States of America, found the risk of victimization to be highest among the lower income

48/ Their pervasive power has been demonstrated by recent experiments. See S. Milgram "Some conditions of obedience and disobedience in authority", in I. D. Steiner and M. Fishbein, eds., Current Studies in Social Psychology (New York, Holt, 1965).

49/ Richard Block and Franklin E. Zimring, "Homicide in Chicago, 1955-1970", Journal of Criminal Law and Criminology, September 1975 (in press).

50/ In urban concentrations of developed countries, the phenomenon of the detached bystanders who ignore a victim's pleas for help has been blamed on "overload" resulting from the proliferation of stimuli impinging on the organism, including not only life events but also messages conveyed by the media which have had a desensitizing and disinhibiting effect by making violence commonplace and by failing to show its real effects (for example, making it look reversible). The dehumanization process can have differing dynamics but its consequences are highly damaging to the society where it occurs. See also Herbert C. Kelman, "Violence without moral restraint; reflections on the dehumanization of victims and victimizers", Journal of Social Issues, vol. 29, No. 4 (1973).

groups for all major offences except homicide, larceny and vehicle theft. 51/ Noting that the likelihood of a serious personal attack on any United States citizen in a given year is about 1 in 550, the President's Commission concluded from its own and other studies that the risks of personal harm were spread very unevenly, with the actual risk for the majority of Americans being considerably less than it is for those who live in slums.

41. Not only impulsive but also premeditated, exploitative types of crime seem to take special advantage of those who are least able to afford it. The Commission noted that fraud can be a particularly pernicious offence, not only expensive in the aggregate, but all too often preying on the weak, the uneducated and the unsophisticated who are a relatively easy mark for unscrupulous "hard sell" tactics that thrive on gullibility and false claims. It also noted that in one study of 500 households in four low-income projects more than two of every five families reported being cheated or exploited by sellers of finance companies. 52/

42. This uneven distribution of the costs of crime has other consequences. Where the risks of victimization are particularly high, insurance premiums are increased for individuals and for businesses. 53/ The latter often also face a serious plight; their higher operating costs are reflected in increased prices which add to the financial burdens of their customers, particularly during periods of inflation.

43. Fear and a realistic desire to escape harm may lead residents of poor neighbourhoods to take taxis or to incur other expenditures beyond their means. Legitimate financial help is rarely available to those with little security to offer as collateral; loan sharking and other exploitative practices (including prostitution and substandard employment) take a further toll.

51/ United States of America, President's Commission on Law Enforcement and Administration of Justice, "The characteristics of offenders and victims of crime", Task Force Report: Crime and Its Impact; An Assessment (Washington, D.C., 1967), pp. 76-77.

52/ David Caplovitz, The Poor Pay More (New York, Free Press of Glencoe, 1967), p. 137.

53/ In submitting its report to the Congress of the United States of America, the Small Business Administration stated, "This report makes it plain that thievery and vandalism have reached such proportions that survival of the small businessman in high crime areas has reached the crisis point ... It shows graphically the deep impact crime is having on the small businessman, whose losses are proportionately 35 times greater than those sustained by big business." United States of America, Ninety-third Congress, third session, Senate Select Committee on Small Business, Impact of Crime on Small Business, 1973 Hearings, part 2, appendix, "Criminal redistribution systems and their economic impact on small business" (Washington, D.C., 1973), p. 270.

44. Hardship and need are even more painful when compared with more affluent and rewarding life styles. Education and information conveyed through the mass media raise aspirations, particularly in consumption-oriented societies. With a dearth of legitimate options, illicit shortcuts may well be used to satisfy them, and in many inner city areas this has become the local ethos. Relative deprivation has long been recognized as contributing significantly to the kinds of stress associated with unrest and crime-proneness.

45. The reality of hidden crime, sometimes of massive proportions, has made untenable the hypothesis that crime is primarily a lower-class phenomenon. Most white-collar crime which forms the bulk of the dark figure of crime is a middle-class product, and the illicit practices of cartels and other large-scale business organizations (including multinational corporations) may well be committed by the affluent tip of the population pyramid or, indeed, by representatives of the Government itself. ^{54/} The work of Scandinavian criminologists has directed attention to the study of the organs and processes of control (legislators, police, the courts, correctional practices, public opinion) and their role in labelling behaviour as "criminal"; recent contributions by "interactionists" in different countries have shed further light on the process of stigmatization ^{55/} of usually lower-class individuals who have come into contact with a selective criminal justice apparatus. This process tends to hasten what may have been isolated acts into criminal patterns perpetuated by the very system whose proclaimed objective is their prevention and control.

46. Regardless of its professed aims, to a large and unfortunate extent the criminal justice process reinforces the principle of differential treatment for the weak and for the strong. ^{56/} Police arrest is obviously a selective process

^{54/} Recent studies of hidden crime in the United States of America, for example, have found that the ratio of serious lower-class to serious middle-class delinquents is 3:2 rather than the official 8:1. See Martin Gold, "Undetected delinquent behaviour", Journal of Research in Crime and Delinquency, vol. 3, No. 1 (1966), pp. 27-46; Eugene Doleschal, "Hidden crime", Crime and Delinquency Literature Review, vol. 2, No. 5 (October 1970), pp. 567-572, and M. López-Rey, Criminología, (Madrid, Aguilar, 1975), pp. 473-487.

^{55/} See, for example, "The delinquent stereotype and stigmatization", Report on the sociological, clinical and organizational trends presented, respectively, by Nils Christie, S. Shoham, M. S. Schipkowensky and J. Freeman to the Seventh International Congress of Criminology, Belgrade, 17-22 September 1973.

^{56/} "Our present sentencing practices are so arbitrary, discriminatory and unprincipled that it is impossible to build a rational and humane prison system upon them", comments Norval Morris in The Future of Imprisonment (Chicago, University of Chicago Press, 1974).

and, even with proper guarantees, the tendency is to focus on the criminal stereotype. If apprehended, the well-to-do can afford expert legal counsel and pre-trial release which are often inaccessible to the less affluent. Even progressive programmes which dispense with money bail require a stable frame of reference for the defendant, which marginal individuals often cannot supply. Pre-trial detention tends - as recent studies have revealed - to influence subsequent judicial disposition: those held pending trial are more likely to receive prison sentences. ^{57/} The disadvantaged are represented disproportionately in the prison population of most countries. ^{58/} Mistrust of the dominant power structure and a biased criminal justice system mitigates against co-operation with it. The presumed deterrent effect of sanctions is minimized when there is little to lose.

47. Public realization that official justice is blind to some and very often not fair (not only because it tends to reward status and the appearance of respectability but also because of its widely discretionary character) undermines confidence in the system. This is particularly true where expectations of fairness by public institutions have been raised through education and through emphasis on equality and the observance of human rights. It also foments resentment in those who feel they serve as scapegoats in an unjust system, and helps to rationalize misconduct.

48. Recognizing that current practices did indeed foster recidivism, ways in which justice can be made less discriminatory and more equitable were explored by the Third United Nations Congress on the Prevention of Crime and the Treatment of Offenders held at Stockholm in 1965. The Commission on Human Rights has devoted attention to equality in the administration of justice and this matter was taken up by the Committee on Crime Prevention and Control at its first and second sessions. ^{59/} It still remains for the insights offered both at these and at other forums (national and international) to be translated into practice. How this can be done most effectively and humanely remains a vital question deserving urgent concern.

C. Development, crime and justice: the widening gap

49. Inequity in the distribution of the costs of crime does not characterize the situation within countries alone. A parallel at the world level can be drawn.

^{57/} See Patricia Wald, "Pre-trial detention and ultimate freedom: a statistical study", and Ann Rankin, "The effect of pre-trial detention", *New York University Law Review*, vol. 39 (1964), pp. 631-655. See also foot-note 167 below.

^{58/} See, for example, Luigi M. Solivetti, "Differenze di classe sociali tra condannati in sede penale ed entrati in carcere", *Rassegna di Studi Penitenziari*, vol. XXIV, No. 6 (November-December 1974), pp. 941-960.

^{59/} See A/CONF.26/4 and E/AC.57/5, E/AC.57/11, E/CN.4/1112, E/CN.5/494 and E/5191.

In spite of ambitious programmes of development and international assistance for this purpose, the gap between poor and rich countries is widening further. There is danger in oversimplifying the complex processes and factors contributing to this situation. It does appear, however, that they are exacerbated by certain practices of powerful trading partners with monopolistic capacity.

50. Contrary to popular belief, investments by internationally operating trading partners frequently benefit them more than the developing countries. Rather than infusing additional capital, or maximizing it in a local partnership which could help to meet some of the developing countries' pressing needs, an outflow of funds from the poor to the rich countries has frequently taken place. 60/

51. During the period 1960-1968 an estimated \$6,700 million were taken out of Latin America as compared with an export surplus of \$5,600 million. These estimates represent officially disclosed figures and do not take account of the loss of benefits through false declarations undervaluing exports from developing countries and overpricing imports. 61/

52. An analysis of the widespread practice of "transfer-pricing" (prices on intracompany transfers are designed to maximize the global profits of the parent corporation, directed towards understating the real profits and thus depriving Governments of tax revenues) reveals the extent of the impact. One recent study of the financial contribution of global corporations to Central American Common Market countries found that while net capital inflows increased in the years between 1960 and 1971 by 344 per cent, outflows rose 982 per cent. 62/ It is thus

60/ See The Impact of Multinational Corporations on Development and on International Relations (United Nations publication, sales No. 74.II.A.5); Richard J. Barnet and Ronald E. Muller, Global Reach: The Power of the Multinational Corporations (New York, Simon and Schuster, 1974); and Jagdish N. Bhagwati, Illegal Transactions in International Trade: Theory and Measurement (Amsterdam, North-Holland Publishing Company, 1974).

61/ A study of the pharmaceutical industry in Chile showed declared prices of imported raw materials to be almost six times the price prevailing on the world market, and another, in Colombia, found 83 per cent of the returns paid to pharmaceutical company headquarters by local concessionnaires derived from false declarations of import prices. See Alberto Couriel, Las Empresas Internacionales: Expansión y Consecuencias sobre América Latina (Montevideo, Tierra Nueva, 1974) (Colección Proceso: 1), pp. 47-48. A report submitted to the 1975 annual meeting of the World Health Organization noted that drugs not meeting quality requirements or not authorized for sale in countries of origin, including time expired products, may be sold to developing countries that are unable to make quality checks on them. A certification plan for pharmaceuticals in international commerce was adopted to stop such malpractices. See World Health Organization, "Prophylactic and therapeutic substances: report by the Director-General" (Doc.A28:12); see also resolution WHO 28.65 of 29 May 1975.

62/ G. Rosenthal. The Role of Private Foreign Investment in the Development of the Central American Common Market (Guatemala City, Central American Common Market (C.A.C.M.), 1973), prepared under the auspices of the Adlai Stevenson Institute of International Affairs, Chicago and the Permanent Secretariat of the C.A.C.M.

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clear that most of the "benefits" of transnational economic operations are not accruing to the poor countries. The vast dark figure - or, more properly, "grey" areas - of undetected illegal or quasi-legal activity, camouflaged by complicated transactions and sophisticated accounting procedures, points to a problem of unprecedented scale.

53. Other kinds of deceptive practices victimize the poorer countries and impair their development prospects. These include the sale of obsolete, defective, overpriced and/or unsuitable technology, often using developing countries to unload accumulated surpluses and models that are not saleable at home. Restrictive business practices which prohibit the use of transferred technology for producing exports multiply the adverse effects on poor countries seeking to earn scarce foreign exchange by exporting manufactured goods.

54. The technology transferred, which is usually also unsuitable in that it tends to be capital-intensive, often has an adverse effect on employment and income distribution. The returns have generally gone to foreign companies and their shareholders or to a tiny group of domestic investors who already receive a disproportionately large share of the national income. Coupled with rising inflation, increasing unemployment and under-employment impose severe constraints on the legitimate options available to marginal segments of the population.

55. The control over popular values and aspirations, which the global corporations exert, exacerbates the problem. The moulding of local tastes through advertising is often most popular among the poor. It may involve a kind of psychological fraud comprising not only outright misrepresentation, but also the influencing of the public's tastes against its own self-interest which further diminishes limited purchasing power. "Commerciogenic malnutrition" is a by-product of campaigns to sell nutritionally questionable food to poor people, designed to develop a cultivated taste for more expensive and nutritionally valueless imports which further cut into what may be a minimal income. The pressures for meeting a variety of cultivated tastes and for acquiring status symbols, particularly among the young and deprived, carry a criminogenic potential fueled by inequity and alienation. 63/

56. Monopolistic practices may also influence the use and distribution of political power, affecting still other aspects of national life. Some Governments have reacted by taking special steps to increase their bargaining power. Recent developments have emphasized the interdependence of all countries, developed and developing alike, and the power of joint action by groups of countries. They have also illustrated the adaptability of cartels to changing market conditions by passing increased costs on to the consumers. The full impact of the transnational corporations on individual countries and the world economy remains to be assessed;

63/ Alberto Couriel, *op. cit.*, p. 43; and Salvador Maria Lozada, *Empresas Multinacionales* (Buenos Aires, Editorial El Coloquio, 1974).

the new United Nations machinery established to monitor their activities ^{64/} and the codes of conduct being elaborated for these activities, as well as for the transfer of science and technology, should help substantially in this task and in the goal of devising concerted national, regional and global policies that will bring the greatest good to the greatest number of the world's people.

57. Although the discussion has focused on negative aspects of the multinationals' operations, the balance-sheet is mixed of course. The claim of the multinational corporations that they act as energizers of development and have helped to bring the world closer together, is not at issue here but, rather, the negative aspects of their activities which may be quasi-licit and take advantage of differences in national legislation; both must inevitably be seen in a broader perspective which is yet to be outlined.

58. Another kind of transnational economic abuse which has grown to significant proportions is smuggling. It functions as a kind of organized export-import business, thriving on differences in national legislation, crime prevention and control policies and economic and social conditions, and balancing the likelihood of profits against the risks involved. Ultimately this kind of activity may create a lucrative "shadow-market" operating concurrently with the official one and having its own wide-ranging effects, not the least of which is the participation of "respectable" well organized and financed groups and the apparent tolerance of the authorities. ^{65/}

59. The differential effects of some of these problems exacerbate the situation in the long run, with the poorest countries being hit most severely. ^{66/} Their prospects are expected to worsen further, because of declining terms of trade

^{64/} This includes the Commission and the Centre on Transnational Corporations established in pursuance of Economic and Social Council resolutions 1913 (LVII) of 5 December 1974 and 1908 (LVII) of 2 August 1974, respectively. See also "Draft Programme of work on the full range of issues relating to transnational corporations: report of the Secretary-General prepared for the first session of the Commission on Transnational Corporations", (E/C.10/2 and Add.1 and 2); for the report on that meeting, see Official Records of the Economic and Social Council, Fifty-ninth Session, Supplement No. 12.

^{65/} See "For contrabandistas, record activity", New York Times Financial and Business Supplement, 26 January 1975, p. 72; and Esbjörnsson, op. cit.

^{66/} Robert McNamara in his address to the World Bank's Board of Governors (30 September 1974), which raised issues of social equity and economic growth, noted: "Though all of us have been affected in varying degrees by these complex events, by far the most adverse effects have fallen on those countries least able to cope with them: our poorest developing member nations. These low income countries relatively disadvantaged in natural resources, without significant foreign exchange reserves, are already suffering from serious internal deprivation - now find themselves caught in a web of economic forces largely beyond their control - they have become the principal victims and are faced with the severest penalties. These countries contain a billion individuals."

(likely to decrease by 20 per cent by the end of the decade) and rising inflation which has already eroded the value of concessionary aid. The delivery of such aid, including disaster relief, may be further impaired by diversionary and/or discriminatory practices which may involve deliberate mismanagement. Black marketeering, fraudulent claims and corruption are forms of aid dissipation which require specific preventive measures including administrative controls, adjudicatory processes and sanctions to provide speedy redress and impede further profiteering as well as further deprivation of the needy 67/ who may become still more embittered, frustrated and alienated and therefore more crime-prone as a result.

60. The multifaceted crisis engulfing much of the world today is expected to become even more acute with burgeoning population growth and rapid urbanization, and thus provides cause for alarm. The Commission for Social Development at its twenty-fourth session drew attention to the gravity of the situation in the statement it adopted at its 1975 session as a basis for a series of recommendations designed to promote implementation of the International Development Strategy for the Second United Nations Development Decade (1970-1980). 68/

61. The General Assembly, at its special 1975 session, will be concerned with the establishment of a New Economic Order, 69/ through appropriate changes in the over-all pattern of international economic relations and policy instruments such as the Charter of Economic Rights and Duties of States and the International Development Strategy. However, the Commission for Social Development pointed out that the critical aspects of the grave economic crisis faced in many areas of the world might lead to an exclusive preoccupation with purely economic problems, thus jeopardizing the prospects for greater conscious efforts to improve over-all social conditions and provide increased opportunity to all people for a better life - the ultimate objective of the International Strategy for the Second Development Decade. The Commission recognized that while the United Nations Declaration on Social Progress and Development 70/ and the Charter of Economic Rights and Duties of States should continue to provide guidelines for national

67/ See H. Sheets and R. Morris, Disaster in the Desert: Failures of International Relief in the West African Drought (Washington, D.C., Carnegie Endowment for International Peace, 1974), and UNSDRI, op. cit., p. 16.

68/ It stated that "unless comprehensive positive action is taken to remove these obstacles to social progress from the life of society, the situation is likely to deteriorate further, and an increasingly greater share of these costs will be borne by the most vulnerable nations and social groups". Official Records of the Economic and Social Council, Fifty-eighth Session, Supplement No. 3.

69/ See "Report of the Preparatory Committee for the Special Session of the General Assembly devoted to Development and International Economic Co-operation on its first session (3-7 March 1975)" (E/5642).

70/ See General Assembly resolution 2542 (XXIV) of 11 December 1969. Article 11 (e) specifically calls for "The provision of social defence measures and the elimination of conditions leading to crime and delinquency, especially juvenile delinquency".

and international action during the remainder of the decade, there was an urgent need for elaborating new goals and policies based on the review and appraisal of progress during the early years of the decade in order to achieve an integration of the social (including the economic, cultural and humanitarian) objectives of the Strategy. It was recognized that these various aspects of social development were different aspects of an integrated developmental process 71/ designed to achieve greater social justice and equality which would guarantee the minimum conditions for a decent life for all people and that such a strategy would ensure the participation of all segments of the population in both formulating the plans for integrated development and in implementing them.

62. If development is to proceed harmoniously, with the minimum of negative side-effects that could nullify hard-won gains, comprehensive measures for crime prevention and criminal justice must form part of over-all development planning carried out in this context. A climate of confidence and security and some assurance that the benefits of development will accrue to the many rather than the few are essential conditions of wholesome and participatory growth. Their realization will require a re-evaluation of attitudes and priorities which all too often have failed to view crime in this broader perspective and to take action accordingly, bearing in mind the wider impact and ramifications of what may seem to be relatively limited problems.

71/ See "Report on a unified approach to development analysis and planning: Note by the Secretary-General" (E/CN.5/519).

II. ASSESSING THE ECONOMIC AND SOCIAL CONSEQUENCES OF CRIME:
SOME RESEARCH IMPLICATIONS

63. The preceding section has traced some of the more apparent socio-economic consequences of different kinds and levels of crime. The cursory conclusion from this overview is that crime exacts a far greater cost than is generally assumed or admitted (or perhaps necessary) and that it falls most heavily on those least able to bear it. From a management perspective, the situation is counterproductive and from a humanistic viewpoint, it is untenable. The exact position varies among countries, and each must determine the scope of its crime problem, its tolerance level and the strategy it wishes to adopt. This will require estimates of the extent, form, impact and direction of crime in a particular society; an assessment of the efficacy of current or envisaged policies and programmes for the prevention and control of crime, and of the extent to which they tend to compound the problem; a formulation of objectives for future criminal policy and planning; and a strategy of implementation based on informed decision making, conceived as an integral part of over-all development planning. A more precise determination of the full consequences of crime is needed to reorder priorities so as to focus more incisively on those exacting the greatest social cost; to minimize the adverse impact of crime through effective strategies aimed at prevention and control, and to redistribute the unavoidable costs more equitably.

A. The need for additional and more precise data on the impact of crime

64. The need for more extensive and accurate information about the economic and social consequences of crime relates to three basic concerns. The first is the fact that decision makers in the field of crime prevention and control have realized for some time now that many of the applied policies are proving ineffective and tend to exacerbate the very problems they were designed to resolve, frequently because they are conflicting. It is increasingly being realized in a wide spectrum of countries that the methods used have been based more on rough estimates than on scientific assessment. Decision making has all too often been based on facile generalizations, political slogans, expediency and piecemeal solutions in an illusory quest for quick results.

65. The second requirement is that criminal policy and planning must more clearly demonstrate their rationale, relevance and viability if they are to compete successfully for the limited national resources available to meet both the demands of national development and the priorities established to promote general well-being which, more than sheer quantitative growth, is becoming recognized as the ultimate aim of development.

66. The third basic concern is that decision makers in the crime field should make better and more extensive use of planning tools, including cost/benefit analysis and other attempts at quantification. More reasoned efforts are needed to set forth priorities in terms of the relative harmfulness of different kinds of crime and to select policy alternatives in terms of the returns they are likely to provide. This also involves decisions about the points in the system where these can most usefully be applied.

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67. The increasing awareness of the interrelationship of all aspects of development and of development planning calls for a systemic view and a coherent set of indicators and concepts to help reveal the full significance (current and prospective) of crime within its broader context. Furthermore, there is a need to develop methods and instruments designed to ensure more effective planning for crime prevention and criminal justice as part of the total effort to improve the human condition.

B. Short-comings of prevailing approaches

68. Policy makers who wish to make qualitative and quantitative assessments of the crime situation or of the efficacy of present crime control policies usually base their information on three main categories of information:

(a) statistics of crimes reported to police, of offenders and offences dealt with by the courts and of offenders dealt with by the prison authorities and other correctional agencies;

(b) estimates of the money and manpower resources spent on the police, the courts, the correctional system and other agencies of criminal justice; and

(c) such miscellaneous sources as mass media reporting on crime, subjective evaluations by the police authorities, information about the public's concern over crime, public opinion reports, figures on insurance and sales of crime protection devices and the like.

69. Similarly, much public debate on crime involves the juggling of various pieces of information from these sources, often in combination with more or less meaningful attempts to compare these data with similar data from other regions. These assessments, however, frequently suffer from one or more of the following short-comings.

(a) Some developing countries lack statistical data of the most basic kind, and those that do exist are scattered among different ministries, are not used, or are improperly used;

(b) Where comprehensive statistics exist, there is often overemphasis on easily obtained and easily measured institutional data, particularly those generated as a by-product of the activities of various authorities;

(c) Data reflecting the seriousness of crime and other qualitative factors are usually lacking because they are not produced by any of the traditional institutions operating in the criminal policy field. Health and labour market authorities are, in turn, uninterested in correlating their institutional data with such attributes as would interest the crime expert. Some attempts in this direction have been made, however, as special research initiatives;

(d) Overemphasis on easily obtained and easily measurable data will generally lead to an overemphasis on immediate and visible consequences. A researcher who discovered the actual monetary damage caused by robberies or assaults and injuries to victims would still lack most of the data needed for assessing the associated costs and suffering. He would lack data on the general anxiety, personal and family suffering of victims of robbery and imprisoned offenders, and on expenditures of private citizens on protective devices. Nor could data be easily obtained on the total social costs, in terms of suffering and anxiety or of prolonged terms of imprisonment or increased police surveillance.

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(e) Crime figures are treated as if they were victimization figures. Many people will interpret a steeply rising crime trend showing that the number of assaults has doubled within a certain time period as meaning that their personal risk of being assaulted has doubled and that the present per capita figure indicates their personal risk of becoming a victim. This is almost always untrue. Crimes of violence against persons seem to be fairly heavily concentrated in a victimization-prone segment of the population although, as noted earlier, random assaults are increasing in some areas;

(f) Assessments based on comparisons are bound to be misleading when the data are used for purposes, countries or time periods other than those intended. If the present indices of the consequences of crime are unsatisfactory as general appraisals of the situation at any given time, these shortcomings will be multiplied when attempts are made to compare the conditions in one area or country with those of another, or from one time to another.

70. The dissatisfaction with the current state of affairs has led to efforts to develop more accurate and more relevant measurements of the economic and social consequences of crime.

C. Improving the assessment of the economic and social consequences of crime:
some major approaches

1. Cost of crime studies

71. The task of assessing all crime costs, direct and indirect, visible and hidden, has attracted the attention of scholars concerned with crime for over a century ^{72/} and has received more sustained attention in the last dozen or so years. ^{73/} An extensive study on the cost of crime was conducted in one country

^{72/} See Willem Bongers, Criminality and Economic Conditions (New York, A. M. S. Incorporated, 1967). Still earlier, Beccaria, Bentham and Quetelet considered this matter.

^{73/} See J. P. Martin and S. Bradley, "Design of a study on the cost of crime", British Journal of Criminology, October 1964, pp. 595-596; J. P. Martin, "The cost of crime: some research problems", International Review of Criminal Policy, No. 23 (United Nations publication, Sales No. 65.IV.4), pp. 57-63; J. P. Martin and Gail Wilson, "Problems in cost of crime analysis: some aspects of police expenditure in England and Wales", International Review of Criminal Policy, No. 25 (United Nations publication, Sales No. 68.IV.7); Robert Hann, "Crime and the cost of crime: an economic approach", Journal of Research in Crime and Delinquency, vol. 9, No. 1 (January 1972), pp. 12-30; and Stephen Brown, An Approach to the Measurement of the Costs of Crime (Menlo Park, California, Stanford Research Institute, 1969), p. 15. See also Argentina, Seminario sobre el Costo del Delito y de su Prevención y Represión, (Buenos Aires, 12-14 de agosto de 1971); Canada, Department of the Solicitor General, op. cit.; and Report of First Regional Seminar of the International Centre for Comparative Criminology (Popovo, Poland, 8-12 May 1972).

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over 40 years ago, but the results obtained have gone largely unheeded. ^{74/} Some sophisticated, comprehensive schemes for the computation of such costs have recently been applied. Studies based on them have revealed the discrepancy between public attitudes and official action directed at certain kinds of crime, and their actual impact. It was found in France, for instance, that tax fraud imposed three fourths of the total economic cost of crime to society (using minimal estimates of tax evasion), although relatively little attention was given to the problem in official policy, and that the next heaviest damage (17.5 per cent) was inflicted by traffic offences. ^{75/} These findings have helped to reorient the country's criminal policy so as to give greater attention to those offences which impose the highest cost.

72. The total cost approach involves a causal chain. For traditional offence categories and for the first links in this chain the relationship is clear. Property crimes involve both transfer and destruction of property. Crimes of violence cause death and bodily injuries. The personnel involved in law enforcement and in the administration of justice must be remunerated. The injuries must be treated and replacements must be found and trained to take the place of incapacitated workers. The costs of pensions and other social benefits for the personnel involved must also be considered. Not only the immediate costs but the costs of keeping the organizations involved on a stand-by basis must be taken into account. The money and manpower spent on crime and crime prevention would usually have been more productively used in other sectors of the public economy. ^{76/}

73. Certain problems arise, however, from the difficulty of drawing the line between crime-related activities and other activities of the various services involved. A major part of the work of the police and the courts is not directly linked to crime, nor even to other types of deviant behaviour. Other problems related to the difficulties of measuring the resources spent by individual citizens, not only on burglar locks or other protective devices but through changes in life styles and habits, the mental energy spent on worrying, protective planning and the like. It is true that the feeling of security or insecurity can be measured to some extent by means of public opinion surveys or special investigations, but the measures obtained will hardly be commensurate with other traditional cost measures.

^{74/} United States of America, National Commission on Law Observance and Enforcement (Wickersham Commission), Report on the Cost of Crime (Washington, D.C. 1931).

^{75/} Philippe Robert and T. Godefroy, Le coût du crime en France pendant les années 1970-71: Compte général de l'administration de la justice pour 1971 (Paris, Ministère de la Justice, 1973).

^{76/} See L. Lernell, "The economic and social consequences of crime: preliminary structural analysis", Paper prepared for the Fifth United Nations Congress on the Prevention of Crime and the Treatment of Offenders.

74. The total cost approach is not only immensely laborious, calling for ever more complex estimates as more and more indirect and subtle costs are added to the list, but its uses are also rather limited. The policy maker and planner may find it difficult to use total cost estimates in efforts to shape crime control plans. Budget controlling authorities may also not be easily influenced by claims based on total costs, demanding, rather, estimates about the savings associated with various resource allocation decisions, which is another matter.

75. These and related problems tend to lessen the interest in achieving a perfect estimate of all imaginable costs of crime at some given moment. The focus of interest, particularly in some areas (for example, in the Scandinavian countries) is shifting instead towards (a) attempts to either carry out limited surveys dealing with certain costs, for example, within the public economy 77/ or costs associated with certain kinds of crime 78/ and/or towards (b) assessing the redistribution of total costs associated with various options for action, which calls for different methods than the over-all assessment of crime costs.

76. While total cost of crime studies may have a somewhat limited role as a tool for the policy maker and planner, a much more liberal attitude towards this approach would seem appropriate from the research standpoint. Over-all cost studies provide a framework and starting point for studies of more limited scope. The value of such studies may lie in expanding the available knowledge of the direct and indirect consequences of crime and particularly in estimates of the various types of social costs, rather than in the end product - that is, the sum total of all the costs. The latter, however, can also be used as a basis for the allocation of funds for research and development, particularly where this is done as a percentage of total costs in each sector, as part of the system of public financing in a country or region: it may in fact provide an incentive to agencies to estimate the "true" cost of crime, taking into consideration also very indirect and hard to measure costs.

77. While the use of rough total costs estimates for such purposes is, within certain limits, both feasible and appropriate, more ambitious and methodologically rigorous studies have recently been attempted. The research

77/ See K. O. Christiansen, "Comparative dollar costs of law enforcement in the Scandinavian countries" (University of Copenhagen, Institute of Criminal Science, 1968).

78/ For assessments of the costs of certain offences see, for example, P. Robert and S. Rizkalla, "Coût du crime, toxicomanie et alcoolisme", Annales internationales de criminologie, vol. 11, No. 2 (1972), pp. 373-390.

design adopted by the research unit of the French Ministry of Justice includes four main categories:

(a) The cost of crime to the public economy

Cost of crime control (deducting income deriving from fines, charges related to the administration of justice and prison labour)

Scientific research and studies

Prevention

Offences against the public economy (fiscal fraud, infractions relating to customs and currency exchange regulations, with the sums recuperated being deducted from the total)

(b) The cost of crime to the victims (collective, e.g., enterprises and individual)

The cost of offences against persons

The cost of offences involving property destruction

The costs of offences involving property transfer

Other offences (e.g., counterfeiting)

(c) Direct cost of crime to society

Cost to the public finances

Cost of offences against persons

Cost of property destruction

(d) Profits from crime

Traffic in persons and prostitution

Drug traffic

Offences involving property transfer

Other offences (at the expense of the public finances)

78. Considerable effort has been devoted to overcoming some of the short-comings noted above by adopting well-defined criteria and appropriate measurement techniques and by avoiding pitfalls stemming, for example, from the aggregation of

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disparate elements. 79/ The use of a systemic approach to over-all calculations of this kind offers particular promise since it permits estimates which take due account of the interrelationships and interactions involved.

2. Criminal statistics

79. While financial and personnel constraints, particularly in developing countries, often preclude the establishment of comprehensive statistical systems, much more could be done with what is or could easily be made available. Statistical offices operating in most countries could include crime and crime cost data; case records could be put to multiple use by simple duplication and the like. Some of these relatively inexpensive and uncomplicated procedures offer prompt pay-off. In addition, estimates can be made from incomplete data by using sampling techniques. These can be quite inexpensive and often more reliable than time series. The collection of statistical data as such is obsolete. Modern information systems make it possible to derive aggregated data from case information as a by-product and as a direct process. It is necessary, however, to be selective without compromising the inherent complexity of the reality which the mix of statistical data represents, and to develop data with its use as a basis for decision making clearly in mind. 80/ From a long-range point of view, a more systematic effort will be required to monitor crime trends and the impact of crime as a guide to policy making and planning for the prevention and control of crime. New approaches to the gathering of criminal statistics have increased their potential for more effective use, but still others are required in order to adequately reflect the true amount, trends and impact of crime, as well as to provide data on the cost of maintaining the services connected with crime prevention and control, particularly as related to some measures of effectiveness.

80. Most proposals for improving the compilation and processing of data have called for mandatory reporting to a central agency, as well as for uniform categories and standard procedures. 81/ There have been recommendations for the reformulation of criminal statistics so that offences would be seen as an interaction between the offender, the victim or complainant and the police; the use

79/ Including an assessment of the different tasks carried out by the components of the criminal justice system in terms of actual performance rather than a priori job descriptions. It has been suggested that in a systemic perspective the supply and production functions in criminal justice, as well as actual cost of crime estimates, must be taken into account for valid cost of crime estimates. See Hann, op. cit., p. 29.

80/ See Leslie T. Wilkins, "Criminal statistics: the future", Journal of the American Correctional Association, June 1971, pp. 47-55.

81/ For a summary of some of these, see Eugene Doleschal and Leslie T. Wilkins, Criminal Statistics (Rockville, Maryland, National Institute of Mental Health, Center for Studies of Crime and Delinquency, 1972).

of occurrence data indicating the extent to which different kinds of neighbourhoods are subjected to different kinds of major crimes; the use of the rate of population mobility as a basis for the measurement of crime rates; the maintenance of crime statistics on the basis of census tracts; statistics reflecting not only the legal classification of the incident but also the social circumstances in which the crime took place; presentation of data reflecting the sentencing strategy; the construction and use of an index of crime and delinquency to measure the seriousness of offences; continuous reviews of data on reported crime in order to supplement official statistics and measurement of the damage done or injury sustained by an illegal act, 82/ thus permitting comparisons of the effects of different kinds of social evils. A comprehensive proposal for a nation-wide system of information on crime and delinquency, adult and juvenile offenders, correction and prevention has envisaged an all-inclusive system of agency statistics and a national registry of offenders. 83/ Computerized self-correcting control systems have also been adopted to minimize subjective factors in police reporting. 84/

81. The recognition of the inadequacy of traditional, compartmentalized statistics as a guide to action has led to new initiatives which reflect changing and emerging concerns, including the increased preoccupation with the functioning of the mechanisms of control. Recently developed systems such as the "Offender-based Transaction Statistics" (OBTS), 85/ now operational in parts of the United States, reflect that concern and have considerable potential for policy making and planning in the crime field. Unlike the conventional agency-oriented statistical systems, this approach seeks to provide data on the operation of the criminal justice system as a whole. Instead of focusing on the workload of the various agencies, such as

82/ This is already being done in the case of certain offences against property, as in the Central Statistical Office of the United Kingdom and the United States of America, Uniform Crime Reports.

83/ Peter P. Lejins, "National crime data reporting system: proposal for a model", President's Commission on Law Enforcement and Administration of Justice, Task Force Report: Crime and Its Impact - an Assessment (Washington D.C., 1967).

84/ Uwe Dörmann, Polizeiliche Kriminalstatistik (Bonn, Kriminalistisches Institut des BKA, 1974).

85/ Steven E. Kolodnev, "The development and implementation of an offender-based 'transaction statistics' system under project SEARCH" and Charles M. Friel, "Offender-based transactional statistics: the concept and its utility", in First International Symposium on Criminal Justice Information and Statistics Systems (New Orleans, Louisiana, 3-5 October 1972); R. F. Bykowski, "Data and usage required for effective crime reduction and criminal justice improvement planning", Peter P. Lejins, "International crime data processing" and W. C. Clifford, "Crime data in a world perspective", in Second International Symposium on Criminal Justice Information and Statistics Systems (San Francisco, 30 April-2 May 1974). (Project "SEARCH" is sponsored by the LEAA and conducted by the California Crime Technological Foundation.)

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the police, the courts and the prisons, it is longitudinal and thus highlights the movement of the offender through criminal justice processes, tracking all agency actions involving him. This kind of data collection would presumably provide new dimensions of information: the passage of time would be known; multiple actions towards the same offender could be studied; and for the first time agency input could be related to the output of agencies that preceded them in the sequence of criminal justice processing. A basic model has been developed and is composed of a minimum set of data elements which maximizes the amount of information that can be provided. The model should help to: determine the impact of crime; measure the effects of criminal justice system policies; forecast the results of policy changes; allocate resources to effective programmes, provide comparable performance standards and predict criminal justice agency workloads on the basis on both crime incidence and internal system factors.

82. This kind of systemic approach might take some time to become fully operational and would be difficult to implement in countries that have only rudimentary facilities. However, simpler forms of analysis, such as flow charts, can be employed in the interim. Other possible guides to needed action in the nature of country profiles, 86/ indexes and indicators could likewise be developed. A comprehensive system for the organization of social and demographic statistics (SSCS) has been proposed by the United Nations. It provides, inter alia, for the inclusion of data on "public order and safety, offenders and their victims". 87/ A preliminary attempt to gather basic crime statistics is being made in pursuance of General Assembly resolution 3021 (XXVIII), and the United Nations Social Defence Research Institute in Rome is seeking to develop and test simple systems of crime statistics, indexes and indicators corresponding to local conditions and needs. Efforts are being made to introduce a degree of comparability that would be adequate for the development of an international data base in this field.

83. The classification relating to public order and safety used in the United Nations System of Social and Demographic Statistics (SSDS) (see table 1) provides for the inclusion of four main categories of statistics, corresponding roughly to the range of the problems encountered: (a) information on offences distinguished by gravity, disposition and location, and information on offenders, including their background and their treatment; (b) information enabling connexions to be traced between personal characteristics and circumstances and the commission of offences, the form of sentence and the subsequent life-history of the offender; (c) information on the individual and institutional characteristics of victims of offences and on the extent of their injuries or losses; and (d) information on the

86/ United Nations Research Institute for Social Development, "Contents and measurement of socio-economic development", Research Notes No. 1; and Aspects of Social and Economic Growth, Report No. 1, pp. 1-2.

87/ Towards a System of Social and Demographic Statistics (United Nations publication, Sales No. 74.XVII.8); and "System of social and demographic statistics: potential uses and usefulness" (ST/ESA/STAT.75).

economic accounts of services connected with public order and delinquency, as recommended in the System of National Accounts. ^{88/} Using a systems approach to data on public order and safety, the scheme portrays in a few measures the impact of offences, the treatment and history of their perpetrators and victims and the associated services and costs. It permits the presentation of data on the average gravity of injury, and average loss or damage, as well as the calculation of inputs and outputs (where possible measured in physical units or at constant prices). Provision has been made for the integrated use of different measurement techniques, including social indicators whose potential usefulness is dealt with in greater detail below.

3. Indexes of crime

84. The compilation of indexes of crime has been the subject of considerable controversy. In one country an annual index, computed simply as the raw sum of police reports of seven "index crimes", includes criminal homicide, aggravated assault, forcible rape, robbery, burglary, larceny of \$50 or more and auto theft. This index presumes to measure the trend and distribution of crime. ^{89/} Cost data related to these crimes are also provided. Criticisms of this method have focused on the vast amount of unreported crime or the "dark figure" of crime, deemed to be several times that officially reported. The method has also been criticized for failing to provide adequately for differences in the seriousness of offences. ^{90/} The first objection has been met by victimization studies and other techniques, and the second objection has been met by proposals such as the Sellin-Wolfgang index, which determines the relative seriousness of "criminal events". ^{91/} Data on "criminal events" weighted in accordance with cultural definitions of seriousness, might provide a more meaningful guide to the severity and nature of crime problems

^{88/} A System of National Accounts: Studies in Methods (United Nations publication, Sales No. 69.XVII.3).

^{89/} United States of America, Federal Bureau of Investigation, Uniform Crime Reports.

^{90/} See Marvin Wolfgang, "Uniform Crime Reports: a critical appraisal", University of Pennsylvania Law Review, 708 (1963); and United States of America, President's Commission on Law Enforcement and Administration of Justice, The Challenge of Crime in a Free Society (Washington, D.C., 1967). The Departmental Committee on Criminal Statistics of the British Home Office (Parks Committee) felt that the use of a crime index based on the total number of indictable offences known to the police should be discouraged. Certain problems will arise from the fact that "seriousness" is not a simple concept, which depends on the perpetrator and circumstances of the offence and on the evaluator. But within particular societies a sufficient measure of agreement can usually be reached to permit operationalization.

^{91/} Thorsten Sellin and Marvin Wolfgang, Measuring Delinquency (New York, Wiley, 1964); M. Wolfgang, "International criminal statistics", Journal of Criminal Law, Criminology and Police Science, vol. 58, No. 1 (March 1967), pp. 59-65; and "Symposium on the Measurement of Delinquency", Journal of Criminal Law and Criminology, vol. 66, No. 2 (June 1975), pp. 173-221.

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than statistics of the more traditional kind. By assigning monetary values to the weights, adjusted according to the attitudes towards offences of different kinds and severity prevailing in the various countries, computations of the cost of crime would be facilitated. Furthermore, the transformation of a gravity index into a monetary scale (using approximately the sixth power of the Sellin-Wolfgang score of crime and, unlike their index, providing additive data), has been found to allow greater sensitivity to the more serious crimes against the person.

85. Certain countries - for example, Canada - have developed alternative index methods based upon the responses of representative groups to a variety of criminal activities. These methods allow each victim's involvement to be shown and provide for an assessment of physical damages incurred by victims. While certain problems in the construction of such indexes persist, pilot projects exploring their use and improvement might well be warranted. ^{92/} Since indexes are constructed by aggregating raw data or by combining social indicators, their usefulness will hinge largely on the information base used. ^{93/} Recent attempts to compare different kinds of indexes indicate that when the mix of crimes remains stable, any index is equally good and a choice should be based on convenience and ease of development; when the mix changes, then almost any index is arbitrary and the information is probably better conveyed by reporting the components and their change than by trying to aggregate them into a single index. This finding should prove useful to developing countries operating under a variety of constraints. It also argues for the use of multiple indexes rather than reliance on any one measurement of choice.

4. Gauging the cost of hidden crime

86. That official statistics represent only the tip of the iceberg of crime has been noted before. The proportion of the "dark figure" of crime varies with different offences, but its true extent far outstrips reported figures, underlining the virtual impossibility of gauging the full impact of crime. Indeed, some offences such as rape which exact the greatest social cost, tend to be vastly underreported. Other offences such as white-collar crime, which involve substantial economic and social cost, may also be largely neglected for a variety of reasons. Yet, if the full consequences of crime are to be ascertained as a basis for remedial and preventive action, more than an impressionistic idea is required: it will be necessary to determine the extent, the trend and the distribution of the consequences of crime.

87. A number of methods can be used for such measurement, and some have been tried with considerable success. Studies of self-reported crime conducted in a number of

^{92/} Dogan D. Akman and André Normandau, "The measurement of crime and delinquency in Canada", Acta Criminologica (January 1968), pp. 134-260.

^{93/} Alfred A. Blumstein, "Seriousness weights in an index of crime", American Sociological Review, vol. 39, No. 6 (December 1974), pp. 854-864. While the author, on the basis of the parallel results obtained between the simpler FBI and the complex Sellin-Wolfgang index, questions the use of seriousness weights in generating an aggregate crime index, he notes its considerable value in other contexts, for example, in examining the progression of individual criminal careers. See M. Wolfgang, Robert Figlio and Thorsten Sellin, Delinquency in a Birth Cohort (Chicago, University of Chicago Press, 1972).

countries ^{94/} have underlined the discrepancy between the officially recorded and actual extent of illegal activity. Victimization and crime damage studies reveal the noxious effects of largely unrecorded crime. Studies of certain collateral phenomena or events might provide a more accurate account of what crime really means to the citizens in terms of fear and changes in life styles. Land value changes and housing sales can indicate the level of concern over crime. Changes in insurance rates, in the freedom with which people use restaurants, parks, theatres and the like can reflect facets of the crime situation in a country not evident from figures for the cases reported to the police or forwarded for prosecution. There can be measurements of such aspects of the quality of life as the feeling of fear (or security), as well as measurements of police activities and of public co-operation with the law enforcement services. Attitudinal surveys can be used to gauge the feeling or insecurity and helplessness, perceived inequity and disregard by the police, other authorities and institutions. Since crime is related to opportunities for its commission, means of measuring these should be sought. For example, the modus operandi index which many police forces employ could be used to identify vulnerable targets or "soft" opportunities as a prerequisite for "hardening" them. Legal ways of obtaining what may now be sought illegally should be studied. Modern statistical sampling and polling techniques allow for the economic acquisition of attitudinal responses on a regular basis by census tract. Specialized approaches to measurement are available for eliciting specific kinds of data. The resulting perspective can usually be enlarged and insight can often be gained by multifaceted analyses. Some imaginative ways of studying hidden delinquency cross-culturally have recently been suggested, utilizing a battery of techniques. ^{95/}

88. The identification of critical issues and the isolation of behaviour, processes and conditions apparently associated with acts legally proscribed, as well as the analysis of the range of possibilities for intervention, can be enhanced by the collection of various kinds of data. These could be obtained from official records and from discussions between community officials and citizens. Such research would

^{94/} For example, Finland, Norway and the United States of America. See E. Doleschal, "Hidden crime", Crime and Delinquency Literature, vol. 2, No. 5, (October 1970), pp. 546-572, and Roger Hood and Richard Sparks, Key Issues in Criminology (New York/Toronto, McGraw-Hill, 1970), pp. 11-79.

^{95/} S. Giora Shoham, "A cross-cultural research on the dynamics of hidden delinquency and its possible control". See also "Research for action in crime prevention: Report on the Interregional Seminar on the Use of Research as a Basis for Social Defence Policy and Planning" (ESA/OTC/75/1) and M. A. González Berehdique "Consecuencias económicas y sociales del delito: nuevos desafíos para la investigación y el planeamiento", Paper prepared for the Fifth United Nations Congress on the Prevention of Crime and the Treatment of Offenders.

lead to the analysis of interrelated variables. By use of sample surveys, additional insights could be gained on the concentrations of offences and on offenders and victims in individual circumstances.

5. Social indicators

89. In recent decades the problem of international statistical comparisons has aroused increasing interest. The quickly expanding volume of statistical data has necessitated the use of aggregate measures such as the "standard of living" or "gross national product per capita" for national or international comparison. At the same time, preoccupation with income and with economic data in general has been shown to give a distorted picture of the situation. Governments and growing numbers of people wish to assess their own and others' life situations on the basis of much more broadly based comparisons of "the quality of life". As select measures of the conditions, circumstances and trends of welfare in populations, based on larger, underlying bodies of social statistics, social indicators are valuable for bringing to the attention of planners, policy makers and the public comparative data on social problems and disparities and for monitoring their broad trends over time. ^{96/} By indicating whether or not the social system is moving towards established goals through the policies and programmes adopted, they provide a basis for both evaluation and planning. They carry special potential in studying the effects of crime, making it possible to look at the total rather than just the intended impact of a policy. As the side-effects of legislation can be more significant than intended outcomes, this is important.

90. Social indicator reports are usually built around a set of social concerns of direct interest to decision makers. Though basically quantitative and developed in the context of "social accounting", such reports usually contain some descriptive text and analysis. Its sophistication often rests in the conceptualization of the indicators themselves which may be multisectoral or sectoral, objective or subjective, informative, reductive, problem-oriented or intended for programme evaluation centring on one or a few social concerns.

91. In recent years, a number of countries have issued social indicator

^{96/} See "System of social and demographic statistics: draft guidelines on social indicators" (ST/ESA/STAT.76); "Social indicators: current national and international activities in the field of social indicators and social reporting" (E/CN.5/518); and Abbott L. Ferris, "National approaches to developing social indicators", Paper presented at the Annual Meeting, Society for General Systems Analysis, New York, 27-30 January 1975.

reports, 97/ including Canada, the Federal Republic of Germany, France, Indonesia, Japan, Malaysia, Norway, the Philippines, Spain, Sweden, the Union of Soviet Socialist Republics, the United Kingdom, and the United States of America. Most include sections relating to public order and safety, and some have refined the methodology so as to permit quite sophisticated measurement. Possible indicators, drawing on conditions generally associated with increases in delinquency and crime, might include such information as the population mobility rate, the rate of urbanization, population concentration, uneven increases in affluence, differential opportunities and the like. The designation for this purpose of certain types of offences (for example, "predatory" or "illegal service crimes") has been suggested, as has the identification of criminogenic zones and

97/ Canada, Ministry of Industry, Trade and Commerce, Perspective Canada: A Compendium of Social Statistics (Ottawa, Information Canada, 1974); and Economic Council of Canada Eleventh Annual Review, Economic Targets and Social Indicators (Ottawa, Information on Canada, 1974).

Federal Republic of Germany, Bundesministerium für Arbeit and Sozialordnung, Gesellschaftliche Daten, 1974, No. 1 (Bonn, Presse-und Informationsamt der Bundesregierung, 1974).

France, Institut National de la Statistique et des Etudes Economiques, Données sociales, 1974 (Paris, Imprimerie Nationale, 1974). An annual social indicator series was initiated in 1972.

Japan, Economic Planning Agency, White Paper on National Life 1974: The Life and its Quality in Japan (Tokyo, Overseas Data Service Co. Ltd., 1974).

Malaysia, The Treasury, The Quality of Life in Malaysia, Economic Report, 1973-1974 (Kuala Lumpur, 1974).

Norway, Statistisk Sentrallyrä, Sosialt Utsyn 1974 (Social Prospects) (Oslo, 1975).

Philippines, Bureau of the Census and Statistics, Indicators of Social Development (Manila, 1975).

Spain, Fundacion IOESSA, Los Indicadores Sociales a Debate (Madrid, Euramérica, 1972).

Sweden, Statiska Centralbyran, Social Utveckling /Social Development/ (Stockholm, 1974).

Union of Soviet Socialist Republics, Economic Research Institute of the State Planning Commission, "Standard of Living Indicators", in United Nations publication, Sales No. E.73.II.7.

United Kingdom, Social Trends No. 5 (London, H.M.S.O., 1974).

United States of America, Office of Management and Budget, Statistical Policy Division, Social Indicators, 1973 (Washington, D.C., 1974). The social indicator movement actually started with the publication in 1969 of "Toward a social report" by the Department of Health, Education and Welfare.

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groups. However, in order to adequately reflect the configuration of social reality, systems of indicators are needed, rather than indications of particular aspects.

92. A recent study has sought to develop social indicators for crime through the application of factor analysis methodology to the problems of aggregating individual measures of crime. It uses six indicators representing five major components of crime and an over-all crime index with the mix of these five in the aggregate. The results reveal that for the country in which it was developed (the United States of America) crime could be viewed as an aggregate of five of its principal ingredients - namely, changes of crime rate, rural crime, violent crime, non-violent crime and urban crime. 98/

93. At the international level, there have been a number of efforts to develop appropriate social indicators. In the context of the Second United Nations Development Decade, selected socio-economic indicators were proposed for monitoring performance on the elements of the International Development Strategy. They include the category "public order and safety". 99/ Several United Nations regional commissions have ongoing indicator programmes. The United Nations Educational, Scientific and Cultural Organization has been studying the methodological aspects of social indicator reporting and has programmes on the applicability of social indicators in development planning and on elaborating indicators of the quality of life. 100/ Among the most ambitious is the Social Indicator Project of the Organisation for Economic Co-operation and Development (OECD) which is trying to develop "hard" and "soft" indicators expressing levels of individual well-being in eight goal or target areas and 24 fundamental social concerns, including "personal safety and the administration of justice". 101/

98/ George Gitter, Social Indicators of Crime: A Pilot Study (Boston, Boston University Press, 1973).

99/ See E/5040 and E/CN.3/423. See also "System of social and demographic statistics (SSDS); draft guidelines on social indicators" (ST/ESA/STAT.76)

100/ Z. Gostowski, ed., Toward a System of Human Resources Indicators for Less Developed Countries, a selection of papers prepared for a United Nations Educational, Scientific and Cultural Organization research project (Warsaw, Polish Academy of Sciences, Ossolineum, 1973); UNESCO, Social Indicators: Problems of Definition and of Selection, Reports and papers in the social sciences, No. 30; and International Social Science Journal, vol. XXVII, No. 1 (1975), devoted to socio-economic indicators: theories and applications.

101/ Organisation for Economic Co-operation and Development, List of Social Concerns Common to Most OECD Countries (Paris, 1973); and Social Indicators: The OECD Experience (Paris, 1974), p. 17.

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Each fundamental concern includes three subareas: (a) violence, victimization and harassment suffered by individuals (involving persons, property and perceptions of danger to safety and security); (b) fairness and humanity of the administration of justice (in the administration of criminal law, civil law and in administrative practice); and (c) the extent of confidence in the administration of justice (see table 1). This differs somewhat from the proposed United Nations scheme which breaks down the category of "public order and safety" into (a) the prevalence and severity of criminal offences and victimization; (b) the treatment of offenders in relation to their characteristics; and (c) performance of institutions whose purposes is the maintenance and improvement of public order and safety. All these categories are subdivided further (see tables 1-3). A detailed comparison of these two comprehensive schemes reveals points of similarity and divergence (see table 3). The inclusion of an institutional performance indicator in the United Nations scheme should facilitate the systematic evaluation of the operation of criminal justice systems. Its victimization indicators also include both the human and institutional victims (per 100,000 persons or establishments at risk) and an average value of loss which should greatly help in computing the estimates of the cost of crime. On the other hand, the OECD's attention to the subjective aspects should also be commended since the importance of including subjective factors in social indicators relating to crime is increasingly being admitted by researchers working in this field.

United Nations System of Social and Demographic Statistics (SSDS)^{a/}

Table 1. Series for selecting social indicators

Concerns and items of data	Common classifications of the system	Characteristic classifications of subsystem	Classifications of other systems and subsystems
VIII. Public order and safety			
(SSDS: II-C, XX and XXII)			
A. Frequency and severity of offences and victimization			
1. Number of offences per 100,000 persons at risk, specified periods	Urban-rural, geographic area, size and type of place	Type of offence	Classification of injuries
2. Number of human victims injured per 100,000 persons at risk, specified periods	Urban-rural, geographic area, size and type of place, sex and age, national or ethnic origin, socio-economic class	Type of offence	Classification of injuries
3. Number of human victims with property loss per 100,000 persons at risk and <u>per capita</u> value of loss, specified periods	Urban-rural, geographic area, size and type of place, sex and age, national or ethnic origin, socio-economic class	Type of offence, type of property loss	
4. Number of institutional victims with property loss per 100,000 establishments at risk and <u>per capita</u> value of loss, specified periods	Urban-rural, geographic area, size and type of place	Type of offence, type of property loss	Institutional sector, kind of economic activity
B. Characteristics and treatment of offenders			
1. Number of offenders charged per 100,000 population, specified periods	Urban-rural, geographic area, size and type of place, sex and age, national or ethnic origin, socio-economic class	Type of offence	
2. Proportion of offenders charged who were convicted, specified periods	Sex and age, geographic area, national or ethnic origin, socio-economic class	Type of offence, number of earlier convictions	
3. Percentage distribution of offenders according to kind of sentence, specified periods	Sex and age, geographic area, national or ethnic origin, socio-economic class	Type of offence, number of earlier convictions, type of offence, kind of sentence	
4. Number of sentenced inmates in correctional institutions per 100,000 population, specified dates	Sex and age, geographic area, national or ethnic origin, socio-economic class	Kind of correctional institution	
5. Number of sentenced persons on probation per 100,000 population, specified dates	Sex and age, geographic area, national or ethnic origin, socio-economic class		
6. Persons released from detention and average duration of detention during specified periods	Sex and age, geographic area, national or ethnic origin, socio-economic class	Not charged, charged or sentenced	

Table 1 (continued)

Concerns and items of data	Common classifications of the system	Characteristic classifications of subsystem	Classifications of other systems and subsystems
VIII. Public order and safety (continued)			
C. Performance of institutions			
1. Proportion of reported offences during specified period cleared up by police authorities by specified later period	Urban-rural, size and type of place, geographic area	Type of offence, type of disposition	
2. Average elapsed time from charge to disposition, initial judicial verdicts during specified periods	Geographic area	Type of offence, type of disposition	
3. Average number of inmates per cell or room, detention (correctional) institutions as of specified dates	Geographic area	Kind of detention (correctional) institution	
4. Index numbers of the annual output and unit - costs of public order and safety institutions	Geographic area		Purposes of government

a/ From SE/ESA/STAT.76, annex, pp. 22-24.

Table 2. List of Social Indicators of the Organisation
for Economic Co-operation and Development a/

PERSONAL SAFETY AND THE
ADMINISTRATION OF JUSTICE

G-1 Violence victimization and
harassment suffered by
individuals

G-2 Fairness and humanity of the
administration of justice

G-3 The extent of confidence in
the administration of justice

F-3-1 Other aspects of urban and rural
life

G-1-a Involving persons

G-1-b Involving property

G-1-c Involving perceptions of danger
to safety and security

G-2-a In the administration of criminal
law

G-2-b In the administration of civil
law

G-2-c In the administrative practice

a/ From Organisation for Economic Co-operation and Development. List of
Social Concerns Common to Most OECD Countries. Paris, 1973, p. 17.

Table 3. Social concerns of the system of social and demographic statistics (SSDS) and in the list of the Organisation for Economic Co-operation and Development (OECD) a/

SSDS subjects of social concern	OECD list of social concerns (some "sub-concerns" have been omitted)
VIII. Public order and safety	
A. Frequency and severity of offences and victimization	Violence, victimization and harassment suffered by individuals
B. Characteristics and treatment of offenders	Fairness and humanity of the administration of justice Extent of confidence in the administration of justice
C. Performance of institutions	No counterpart in the OECD list

a/ From ST/ESA/STAT.76, annex, p. 1.

94. In a few countries, there have been pioneering efforts to consider such subjective reactions pertaining to crime as the feeling of security or insecurity relating to it, and to actually measure these elements. These initiatives have also derived from a recognition that the effectiveness of law enforcement and criminal justice services depends significantly on the degree to which they meet subjective as well as objective safety needs. 102/

(a) Developing a "level of safety"

95. In Japan a "level of safety" measure has been developed, which is to serve as a basis for planning police activities. 103/ In devising this indicator (or indicator system) the National Research Institute of Police Science recognized that the concept of "safety" included the psychological as well as the physical aspects. More specifically, "safety" has been defined as (a) the absence of or protection from physical danger; (b) protection from loss of or damage to property; (c) both the absence of specific anxiety and a generalized sense of well-being; and (d) freedom from coercion and the infringement of individual rights even by such authorized persons as police officers. The subjective dimension of safety in any one area or community is based on the individual's perception of the occurrence of crime, police effectiveness and other factors relating to the crime situation in the particular community. The purpose of this research project has been: (a) to develop an indicator of the "level of safety"; (b) to show police and citizens how to achieve the subgoal of a minimum safety level in each community; (c) to propose a way of reducing the level of anxiety through police activities; and (d) to develop a yardstick for the evaluation of each activity contributing to such a reduction.

96. To attain the above-mentioned objectives a number of steps have been devised for achieving specified subgoals, some of which have already been completed. The aim has been:

(a) To analyse the elements of the social concern relating to safety or anxiety and to find the indicators in the over-all measure which would show quantitatively the level of each subconcern by indicating the relationship, using a coefficient of correlation between the objective and the subjective indicators. The level of safety is presumed to be reduced as the numerical value of the subjective indicators increases and/or as the numerical value of the "objective" indicators decreases;

102/ See for example, Marek Kosewski, "Poczucie bezpieczeństwa jako kryterium społecznej efektywności systemu sprawiedliwości karnej" /The feeling of safety as a criterion of the social effectiveness of the criminal justice system/, Przegląd Penitencjarny, No. 4(36) (1972), pp. 46-49.

103/ Fumio Mugishima and Kanehiro Hoshino, Planning for Police Activity on the Basis of "Level of Safety" Measures (Tokyo, National Institute of Police Science, Environment Section, September 1974). Paper prepared for the Fifth United Nations Congress on the Prevention of Crime and the Treatment of Offenders.

(b) To survey the demand of people for a "higher level of safety" attained through improved police activity. The level of safety so conceived has been graded, with three main levels: survival, minimum requirement and full satisfaction level;

(c) To measure the "level of anxiety or fear" in the community. Recognizing that such indicators as the annual rate of crime and the clearance rate do not necessarily reflect the level of anxiety, the investigators carried out a pilot survey of some 2,000 adults. This survey revealed that the anxiety score generally differs by the type of victimization, degree of harm, method of inflicting harm and place where each crime was committed. The "whole community harm" or level of anxiety was derived by using the formula

$$\frac{\text{Anxiety score summed over criminal events}}{\text{Total population}} \times 10,000$$

(representing the average extent of anxiety units per 10,000 population);

(d) To measure the "level of safety" and the "level of police power and activities". This survey is now being carried out on 7,000 persons over 20 years of age in 34 communities selected by stratified sampling. The responses given to each question are arranged to indicate the extent of the fear of the respondent (arranged to be scalable) and the raw score of safety can be derived from the extent of fear. Each raw score is weighted by the degree of anxiety for each safety concern and converted, and the total sum of these scores is considered to represent the "level of safety" of the community;

(e) To provide a "level of safety" measurement. The measure has been conceived as the product of the anxiety score summed up over criminal events in the community, the perceived seriousness of criminal events in the community (positive measures); the numerical value of the indicators of police power and police activities which serve to reduce the "level of anxiety"; and the perceived level of police power and police activities in the community (countermeasures);

(f) To ascertain the minimum requirement of safety and to determine the minimum safety level. In this survey, the minimum safety level was fixed between the minimum requirement and full satisfaction levels, being determined by the aspirations of the community and by a survey of specialists using the Delphi method (consensus of experts). It is noted that the aspirations of the people of Japan are approaching the full satisfaction level. However, the minimum safety level should not be an unrealizable ideal but should be set within a range which can be achieved through administrative and financial reform;

(g) To evaluate police activities as a means of reducing anxiety based on the "safety measure". This evaluation is to be carried out through a comparative study of each police activity in communities having different safety levels.

97. Future planning based on the results of these analytical studies and field experimentation envisages improved police performance combined with programmes designed to increase the level of social welfare. Part of the strategy is the

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provision of full and precise information to the public regarding criminal events in the community in order to reduce unrealistic fear and to increase the feeling of safety. Since the efficiency of crime prevention and a heightened level of safety vary for different kinds of offences, appropriate measures to cope with different categories of crime are considered essential in order to enable the police to more effectively protect people from crime-related danger and anxiety.

(b) Potential and constraints

98. The goal of creating a universally accepted and reliable set of personal safety indicators is not yet in sight, although significant progress in this direction has been made. Work on social indicators has certain inherent constraints and requires the development of guidelines for their appropriate use. ^{104/} Since each indicator usually measures a fraction of one of the dimensions of a multidimensional concept, their integrative use is required for more comprehensive analysis. The construction of sets of indexes consisting of several indicators permits a closer approximation of social reality. ^{105/} To become fully useful, indicators have to be part of a model or a system that integrates the data used and reflects more accurately the complexities of social configurations and social change. Their construction requires a clear articulation of goals which, in the crime control field so beset by ambivalence and contradictory aims, is a difficult but crucial task. They may have to be initially developed in limited situations. If the indicators are to assess social costs at the macro-level and at the same time adequately take into account differences in social cost imposed by crime on various social classes, strata or groups, they must be sufficiently broad and at the same time highly sensitive to group and individual variations. The development of indicators, particularly of those purporting to determine subjective reactions to crime and crime control policies, calls for the use of batteries of methods rather than any one particular technique. One such method is the opinion survey which, however, may not reflect the subtle shadings of the phenomena studied or the dynamics of the processes involved.

99. From a utilitarian viewpoint, social indicators constitute an invaluable tool for policy makers and planners in measuring needs, setting objectives and evaluating

^{104/} See, for example, J. Brand, "The politics of social indicators", British Journal of Sociology, vol. XXVI, No. 1, pp. 78-90; Working papers prepared for the Organisation for Economic Co-operation and Development Working Party on Social Indicators, particularly "Clarification of operational framework for G-Area 'Personal Safety and the Administration of Justice' and associated sub-concerns in other areas" (MO/WP1(75)11 of 7 April 1975); "Personal Safety and the Administration of Justice, Primary Goal Area: social indicators for actual victimization" (MO/WP1(75)12 of 11 April 1975) and "Personal Safety and the Administration of Justice, Primary Goal Area: data sources" (MO/WP1(75)13 of 15 April 1975).

^{105/} See J. C. Sherman, "Measurement of social concepts: indicators and indexes", Indian Journal of Social Work, vol. XXXIV, No. 4 (January 1974), pp. 359-365; and Kenneth C. Land and Seymour Spilerman, Social Indicator Models (New York, Russell Sage Foundation, 1975), p. 230.

achievements, and as such they serve as "policy indicators". It has been suggested that such indicators will be used when their utility to policy makers is greater than the cost of using them. 106/ The latter will include the inertia and opposition which may have to be overcome in translating the indicator from social theory into a measure of policy. Thus, the greater the change implied by the information, the greater its cost; but where dissatisfaction with the existing state of affairs is rife, the costs of inaction may be greater still.

6. Crime damage and victim surveys

100. The major part of all research into the economic and social consequences of crime will continue to take place within the scope of special surveys of certain offence categories, certain victim categories or otherwise clearly delineated research targets. Within their restricted domains, the results obtained through such surveys are of particular value for assessing the social costs and benefits associated with policy alternatives. Compared with the conceptual and practical difficulties inherent in the total cost approach, the narrowing down of the task to an assessment of only certain types of cost and suffering associated with certain types of offences will usually appear to be a more feasible and perhaps more promising undertaking. However, inasmuch as such surveys are frequently based on data obtained in connexion with the reporting of crimes or the sentencing of offences and are limited to, for example, direct monetary losses and physical injuries, 107/ the method is unsatisfactory in that it covers only damages caused by recorded offences. For this reason, the additional use of victimization surveys has been recommended. 108/ The population survey approach was originally used for the purpose of estimating the dark figure of crime and is still considered a major research instrument in the area of victimology. The increased concern over the unreliability of crime figures as indicators of the seriousness of the crime situation has, however, led to a shift of emphasis and damage figures are now to an

106/ See Andrew Shonfield and Stella Shaw, "The cost of using indicators", Social Indicators and Social Policy (London, Heinemann Educational Books, 1972), pp. 123-136.

107/ See Preben Wolf, "Skader og tab forvoldt ved krimenelle handlinger" /Damages and costs caused by criminal acts/, Nordisk Tidskrift for Kriminalvidenskab, vol. 61, No. 1 (1973).

108/ A new instrument for measuring levels of crime nation-wide and in selected large cities of the United States of America, the National Crime Panel, relying on scientific sampling procedures, gauges the extent to which individuals age 12 and over, households and commercial establishments have been victimized by certain types of crime which are of major concern to the general public. See United States of America, Department of Justice, Law Enforcement Assistance Administration, Criminal Victimization in the United States, National Crime Panel Reports (Washington, D.C., National Criminal Justice Information and Statistical Service, 1974).

increasing extent being used to correct or supplement the information based on crime figures. 109/

7. The need for statistical series on harm caused by crime

101. As noted above, official statistics in most countries contain information only about offences, offenders and measures taken. Crime classifications occasionally include references to damage caused by the crime using, for example, either a rough legal and actuarial division of crimes against property into two or three subdivisions, according to the value of the object. Occasionally, the legal classification will coincide with a description of the damage caused in such a classification as "wounding which has caused grievous bodily harm".

102. These occasional and unsystematic references to harm caused by crime cannot provide serious and continuous estimates of the economic and social costs of crime nor can they be used in making annual comparisons. Furthermore, modern criminal jurisprudence tends to favour crime definitions which concentrate on the perpetrator's intentions and degree of deliberation rather than on the outward consequences of the act. It thus has become very difficult to tell whether more numerous crimes of assault have substantially increased actual damage. The increase may have taken place within the category, "attempts and assaults without any physical damage", and assaults belonging to the category of entailing harm amounting to "permanent total work incapacity" have decreased or vice versa. Nor do the crime figures indicate the concentration of victimization on frequently assaulted victims, or about the degree of provocation typically associated with the assault crimes in question.

103. This example illustrates the need for continuous statistical data on harm in the sense of quantifiable crime damages. Such information provides indispensable additional information in those cases where it has been possible to supplement the crime report information with damage data, as has been the case in homicide.

104. In certain countries, such as Finland, criminologists have requested that official statistics be supplemented with a new statistical series on crime damages. As a result, in 1970 the Scandinavian Research Council of Criminology carried out a large-scale survey of crime damages which revealed that the picture obtained on the basis of damage information differed in important respects from the one obtained using criminal statistics. 110/ By the use of a successful demonstration project, carried out in six police districts, Finnish criminologists persuaded the Central Bureau of Statistics in Finland to start a new series of "crime damage statistics" on a limited scale and on a trial basis. The data for this series, which comprises crimes against property and crimes of violence, hav

109/ Inkeri Anttila, "Victimology - a new territory in criminology", in Scandinavian Studies in Criminology, vol. 5 (Oslo, Universitetsforlaget, 1974), pp. 7-10.

110/ Wolf, op. cit.

been collected as of 1 January 1974. 111/ It is expected that data for different statistical series can be collected with one standardized form to serve several different purposes.

105. In the Federal Republic of Germany, certain data about crime damages have for some years now been published in connexion with police statistics. 112/ Similar projects have been or are to be tried out in other countries.

106. This type of statistical information has some important advantages as a basis for assessing certain social costs of crime:

(a) The information is of immediate relevance for estimates of personal safety which, in turn, are major components of any estimate of the seriousness of the crime situation;

(b) Damage statistics are less sensitive to certain factors which threaten the reliability of crime report statistics and would thus be indispensable for continuous evaluation of the crime trend;

(c) The information provided by damage statistics is usually more suitable for inclusion in formalized models for cost/benefit analysis than the presently available crime statistics;

(d) Regional and international comparisons based on crime damage statistics would have meaning; present crime comparisons usually do not;

(e) Crime damage statistics can be used for the choice of a set of measures of personal safety, which could be part of a social indicator system measuring the "quality of life".

D. Assessing the efficacy of measures for crime control

107. To determine whether current crime prevention and control efforts are serving their declared purpose of reducing or containing crime, policy makers, planners and administrators must have some way of assessing their effectiveness. The crucial role of evaluation in any viable effort aimed at crime prevention and control is

111/ Tuija Makinen, "Experiment in crime damage statistics", series M:28 (Helsinki, Institute of Criminology, 1973).

112/ Federal Republic of Germany, Presse-und Informationsamt der Bundesregierung, Bulletin No. 92 (Bonn, 31 July 1973), p. 925.

increasingly being recognized, 113/ and in some instances the inclusion of an evaluation component in ongoing action programmes and research projects has been made a condition for funding. The evaluation process is the aspect of criminal policy development in which planners and other decision makers are most dependent on researchers, and this relationship has increasingly been formalized by the establishment of special research and/or evaluation units. The use of evaluation techniques permits determination of: (a) whether or not the programme was carried out in accordance with the prescriptions set forth in the planning and development stages; (b) whether or not it worked; (c) whether the expenditure of resources has been efficient in comparison with alternative means of achieving the same objective; and (d) whether in the light of the returns obtained certain policies should be continued, expanded and/or replicated, or whether they should be modified or discarded. As authorities anxious to conserve human and material resources are increasingly challenging policy makers to demonstrate the positive impact of programmes, rigorous scientific criteria and methods must be employed.

108. Evaluative activity ranges from basic systems management to the goal of achieving impact on the community. The evaluator can fulfil different functional roles, ranging from the clerical-statistical level to participation in management decision making. Information facilities may range along a continuum from unplanned and unco-ordinated natural data banks to planned data systems supported by allocated resources. The methods of evaluation may be non-experimental (case studies, surveys, time series, cohort analysis, "before" and "after" studies), quasi-experimental, or they may involve controlled experiments. A surprising finding is the apparently considerable pay-off derived from "weak" or non-rigorous designs, such as case studies 114/ or surveys which are apparently useful in

113/ A project on evaluation has also been included in the United Nations 1973-1977 work programme in crime prevention and control. The matter was dealt with at the Seventh International Congress on Criminology (Belgrade, 17-23 September 1973) and at the First Criminological Colloquium of the Council of Europe (Strasbourg, 28-30 November 1973); it is one of the items on the agenda of the research conference to be convened in Montreal before the Fifth United Nations Congress on the Prevention of Crime and the Treatment of Offenders. See also Ahmed Khalifa, "Evaluation of programmes for crime prevention and control" (Cairo, National Centre for Social and Criminological Research, 1974); and P. Nejelski and J. La Pook, "Monitoring the juvenile justice system: how can you tell where you're going if you don't know where you are?", American Criminal Law Review, vol. 10, No. 9 (1974), pp. 9-31.

114/ A quick case study evaluation method has recently been developed to be comprehensive and useful to the decision maker. It provides a short systematic framework for assessing a variety of programmes (originally in the area of drug abuse and control). Using 10 analytical criteria, several types of descriptive data and a plan for subjective assessments by evaluators, it permits an average treatment programme to be evaluated by two people in two days. Using the results, administrators should be in a better position to decide (1) whether the programme should continue to be funded; (2) whether similar programmes should be introduced; and (3) whether technical assistance should be provided. See United States of America, Special Office for Drug Abuse Prevention, Quick Evaluative Methodology (Washington, D.C., 1973)

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promoting changes in systems. Controlled experiments provide an excellent link between research and practice. They offer a compromise between the rules and methods of experimental evaluation, on the one hand, and of what can be done ethically and pragmatically, given the realities of the particular situation, on the other. Up to this point, little good evaluative research has been done and even less has been used for the formulation and modification of policy or for the effective longer-term planning because of a variety of constraints. 115/ In spite of them, however, sound evaluative schemes are possible and should be included as an integral part of planning and programming. 116/

109. While there are a number of possible evaluation models, crime-related work in the past has relied primarily on the medical treatment model and the academic social science model. Their limitations in the assessment of crime control and prevention have been pointed out by a number of critics. Also, recidivism rates have often been used as the criterion for evaluating "treatment success". These rates are often referred to in an inadequately specified manner leaving in doubt what constitutes recidivism. In addition, success may be a matter of degree rather than an "either/or" proposition. The lack of clear-cut differentials in the success rates of various types of treatment of offenders designed to effect behavioral change has been one of the factors responsible for current criticism of the therapeutic model as applied to crime. It has also reinforced the belief that the aim should thus be primarily to avoid doing harm and that the system rather than the individual offender may have to be changed. While there is a continuing need to assess the efficacy of different treatment methods for different categories

115/ Some of the short-comings of evaluative research have been pointed out along with suggestions as to how it could be improved so as to facilitate planning in the short, medium and long term. See Denis Szabo, "Evaluation des systèmes de politique criminelle", paper presented to the Seventh International Congress on Criminology, Belgrade, 17-22 September 1973.

116/ Several useful guides to evaluation management have recently been issued. See Stuart Adams, Evaluative Research in Corrections: a Practical Guide, (Washington, D.C., United States of America, Department of Justice, National Institute of Law Enforcement and Criminal 1975); Daniel Glaser, Routinizing Evaluation: Getting Feedback on Effectiveness of Crime and Delinquency Programs (Washington, D.C., National Institute of Mental Health, Center for Studies on Crime and Delinquency, 1973); Peter P. Lejins, Justification and Evaluation of Projects in Corrections (College Park, Maryland, University of Maryland, Institute of Criminal Justice and Criminology, 1973) (Governor's Commission, Criminal Justice Report); E. Albright and others, Evaluation in Criminal Justice Programs: Guidelines and Examples; M. D. Maltz, Evaluation of Crime Control Programs (Law Enforcement Assistance Administration, 1972); and C. Clifford Atkinson and others, "A working model for mental health program evaluations", American Journal of Orthopsychiatry, vol. 44, No. 5 (October 1974), pp. 741-753.

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of offenders, 117/ a wider perspective would enhance the likelihood of fruitful results.

110. In assessing the impact of policies and the results of specific programmes for crime prevention and control there has been a growing reliance on approaches developed in economics. These have been employed to examine outcomes in terms of both efficacy and efficiency. Approaches such as cost/benefit and cost/effectiveness analysis have increasingly been employed in the social field including crime control. The choice of one option rather than another must be viewed in terms of both its specific and wider impact, to be evaluated in terms of an appropriate and consistent set of objectives. While evaluation can take different forms and use different criteria and techniques, certain basic requirements must be fulfilled by sound evaluative research. This means attention to the type of data needed, the arrangements and attitudes favourable to a real partnership between decision makers and evaluators, the proper utilization of evaluation results and ways of encouraging quality control which would permit policy makers and administrators to set standards of performance and to check on their continuous attainment. Ultimately, this requires the evaluation of evaluative research itself.

111. A strategy for successful evaluation involves certain basic steps: (a) the formulation of the objectives, if possible in quantitative terms, of the goals and objectives of the programme or project to be evaluated, with priorities and intervention strategies geared to meet present and anticipated needs; (b) an indication of the way in which the programme or project under consideration will contribute to the achievement of the impact goal (including, for projects jointly evaluated, measurement of their relative contribution to the achievement of that goal); (c) identification of the evaluation measures for the programme/project in question (using one or more measures to determine the level of achievement for each objective); (d) establishment of data needs, taking into account their inherent constraints, including cost and data management and validation requirements; (e) determination of methods of analysis, with attention to how each measure will be calculated and how they might be combined for programme and project evaluation; (f) monitoring of the implementation of the evaluation plan; and (g) evaluation analysis to assess the degree of success of programmes or projects and the reasons for it, with interim success levels stated in terms of project objectives or programme goals.

112. It has been noted that the impact of evaluation has shown itself primarily in system change rather than client change as a reflection of the obvious need for

117/ Attempts at quantification of penal sanctions should help in this approach. See, for example, Karl F. Schumann, Zeichen der Unfreiheit, Zur Theorie und Messung sozialer Sanktionen (Freiburg-im-Breisgau, 1968). See also B. S. Nikiforov, ed., Efektivnost' ugolovnykh mer borby s prestupnostiu /The Effectiveness of Penal Measures in the Fight against Crime/ (Moscow, 1968); R. Hood and R. Sparks, "Assessing the effectiveness of punishments and treatment", in Key Issues in Criminology, op. cit., pp. 171-192; and "The effectiveness of punishment and treatment", in Leon Radzinowicz and Marvin Wolfgang, eds., Crime and Justice, vol. III (New York, Basic Books, 1971).

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system revision in corrections and in other aspects of criminal justice, and that its importance as an objective of evaluation has been obscured by preoccupation with offender rehabilitation as an objective. The chance for greater productivity or efficacy of research would seem to be in initiatives where both system change and offender change are taken into account as objectives or goals. There is a likelihood that in the long run increased importance will be given to such criminal justice goals as "restoration of the victim" and "equity in criminal justice involvement and processing", and that as these and other goals come in for consideration and targeting, the present objectives of punishment, incapacitation, deterrence and rehabilitation will undergo some re-evaluation. ^{118/} Though attention will still need to be given to determining what kind of interventions, for whom and when, would seem most likely to interrupt criminal careers, ^{119/} in the long run the attempts to keep down the cost of crime require also attention to the wider socio-economic system and psychological as well as political climate, including better systems of socialization and control in the community. Within such a larger perspective, evaluative research in policy making and planning - co-ordinated, continuous, flexible, productively used and routinized - will play a pivotal role in selecting among alternative courses of action those likely to prove most fruitful in meeting specific crime-related objectives in relation to broader national goals and changing circumstances.

E. Measuring equity in criminal justice

113. It is difficult to determine the exact degree of "justice" in the courts, but some quantification of output is possible by considering certain crucial elements. Speed of determination, for example, may be measured by contrasting the number of cases pending with those completed within a given time period. Fairness could be gauged by the equal availability of pre-trial release procedure which is not weighted against the defendant. ^{120/} For the judicial process, a single index, while not ideal, would seem to provide a reasonable measure of the level of trade-offs between the injustice of unfair trial practices and the contribution to security by obtaining convictions where crimes have taken place. This index would be the percentage of convictions obtained

^{118/} Stuart Adams, *op.cit.*, pp. 115-117.

^{119/} A recent study has produced findings from which the efficient timing of intervention schemes might logically be inferred. It suggests that, for young offenders comparable to the target group, interventions which may involve expensive treatment programmes be held in abeyance until the commission of the third offence. See Marvin E. Wolfgang, Robert M. Figlio and Thorsten Sellin, *op. cit.*

^{120/} For a more extensive discussion of this proposal, see Robert Evans, Jr., *Developing Policies for Public Security and Criminal Justice*, Special Study No. 23 (Ottawa, Economic Council of Canada, 1973), pp. 80-83.

in various courts in cases where the charged party pleaded innocent. If such an index grouped data according to the social, racial, ethnic and other characteristics of those charged, it would also provide an indicator of the distribution of justice among different groups of citizens. Since equity in the court process or in conviction extends from summons to the type of sentence given, a number of different measurements will be required for the effective monitoring by the authorities and the public of events in the court system. They can be provided through a continuous data flow as part of the day-to-day operation of the courts, using already available official forms, somewhat expanded perhaps, and adapted to meet the requisite data needs. 121/

114. Post-conviction justice may be even more difficult to ascertain, partly due to the conflict inherent in the objectives to be attained. In meting out sentences, in parole decisions and so forth, the aim of maintaining an acceptable level of crime may not be consonant with the policy objective of fair treatment for individuals. Problems arise also from fragmentation of the correctional process and differing aims among different agencies and jurisdictions. The wide discrepancies in sentences are among the most inequitable features of any criminal justice systems and underlie much of the resentment which an offender may feel at having been a "fall guy" while others literally may have gotten away with murder. This includes the differential in the maximum penalties allowed, in penalties applied for the same crime or for crimes inflicting the same damage on society. The selective application of sanctions to certain groups or areas contributes further to inequity, although its degree may be hard to quantify. The difficulties involved in measuring the fulfilment of other criteria of the adequacy of correctional output, such as effectiveness, which have been raised elsewhere, need not be reiterated here, except to suggest the use of more valid criteria than recidivism rates (one suggestion for measuring the output of correctional agencies has been in terms of the total number of crime-free days of those passing through them).

F. Research for action: towards a systemic approach

115. The relative lack of effective policies and planning for the prevention of crime may in part derive from the frequent isolation of measures against crime from the wider socio-economic context in which crime occurs, and from the tendency to divorce theory from practice. Makeshift "solutions" have tended to be compartmentalized and neglectful of the larger realities which ultimately affect their failure or success and with which someone at a higher level has to contend. Policy making and planning for the prevention of crime involve values, political decisions, contingency factors and a number of

121/ The system in operation in the province of Quebec can serve as a possible model for such data compilation. Many other examples of systems with potential for accurate, up-to-date and relatively complete data undoubtedly also exist.

other considerations. But within these constraints there is considerable room for manoeuvre through which scientific and effective approaches could be used to reduce the margin of error and to make the most informed and viable decisions possible under the circumstances.

116. "Action-research", more broadly termed "problem-solving research", seeks to test theoretical assumptions in concrete situations, with the aim of enhancing the validity of future policy development. Evaluation is the essential link connecting action-research to such policy formulation. Action-research may involve operations research (though more precisely the latter may be looked upon as applied decision theory), using experimental or other models, simulation or related techniques such as Markov process, gaming theory, queuing, linear or dynamic programming and the like; or it may consist of field research, with demonstration projects and pilot schemes where hypotheses can be tested and from which successful experience can be replicated and generalized. The latter can range from limited small-scale projects, confined to one particular action at any one time, to large "saturation projects" involving multiple activities and designed to achieve wide-ranging impact. Further refinements and new techniques are being developed that represent methodological advances allowing for greater quantification and minimizing experimental error. They can serve to improve the conditions under which policy and planning decisions are made.

117. For maximum benefit, in a field as multifaceted and complex as that of crime prevention and control, there is a need for an interdisciplinary approach that utilizes a whole battery of methods as well as certain options in particular situations. The aim should be to engage in the kind of exploration and planned innovation which would serve to revitalize and reorient prevailing practice, and to effect much needed and often long overdue system-wide changes. Unfortunately, for the study of some of the most important problems, the methods are still quite imperfect and, wherever they have been refined, they have all too often been applied to the study of limited or insignificant problems. Problem-oriented and field-oriented research seems to hold special promise, but the question is how it can be conceived, carried out and fed into the decision-making process in the crime field so as to make the maximum contribution. It has been suggested, for example that to be most productive, operational research calls for the execution of clusters of projects ^{122/} which are selected jointly by policy makers and researchers and which concentrate on sensitive areas or weak points in the machinery of criminal justice to determine points of optimal application. The selection of areas of potentially greatest impact for action research in crime prevention and control would seem to be a crucial condition, particularly in countries where numerous high priority needs compete for very limited resources. How these areas are to be selected may in itself be an important problem for action research as well as a matter of ideo-political choices.

^{122/} Philippe Robert in his paper "Operational research", prepared for the 1970 Council of Europe Conference of Directors of Criminological Research Institutes, refers to "high-efficiency research clusters".

118. Experimental changes of systems can be more efficient as a means of testing different hypotheses than can studies of static systems. A close relationship between action research and administration permits the introduction and monitoring of experimental changes with the desired degree of scientific control. A systemic approach to crime-related research and action can do greater justice to the complexities and interactions involved. It also facilitates the assessment of the effects of policies and programmes adopted on other facets of the system. Such a perspective has all too often been lacking in decision making in the crime field as it has in broader developmental efforts. The failure of isolated measures and the imbalances produced by policies neglectful of their own wider ramifications attests starkly to this fact. That there is a movement towards a more integral approach is evidenced in recent initiatives, some of which are referred to later on. The application of systems analysis to social problems has sometimes been criticized as being too mechanistic. The use of this approach has its caveats but if it is employed as an aid to, rather than a substitute for, in-depth analysis, its scope in understanding the dynamics of social processes such as crime and crime control and in determining the range of their consequences can be vastly enhanced.

119. A symbiosis, or better still, a fusion, of applied social science relating to crime and the systems approach would facilitate the development of policy analysis and of interdisciplinary policy research teams. The advent of "think-tanks" and policy-research institutes in some countries has grown largely out of the recognition that the proliferation of research centres and research projects carried out in these countries to date has had little impact and that more directly relevant and practical work must be undertaken if the major problems facing societies are to be tackled more effectively. The developing countries might profit from this experience by adopting a more viable course from the start and thus achieving both more fruitful results and eventual savings. Approaches to research focusing on regional and local requirements would help to produce the kind of indigenous criminology which offers the greatest promise. The regional United Nations institutes are testimony to the validity of this approach and other possibilities exist. How they can best be utilized to produce the kind of research that would be most useful as a guide to action is a question meriting special concern.

120. Whatever the approach or the methodology, the success of any endeavour directed towards promoting a more organic relationship between research and action in the prevention and control of crime hinges ultimately on the human factor. The development of manpower resources to further this aim must take into account not only the professional and occupational differences separating criminological researchers from practitioners, and their respective training requirements, but also the subtler problems of barriers in human relations and of interpersonal dynamics which must be resolved so that the necessary kind of partnership can be established. This means development of a common frame of reference and effective channels of communication for policy makers and researchers concerned with crime prevention, most of whom may have to be specially trained and sensitized for this task.

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G. Anticipating the consequences of crime and crime control policies

121. Policy making and planning for the prevention and control of crime and its consequences must necessarily be directed towards the future. Social forecasting is admittedly more difficult than economic or technological forecasting.

However, promising beginnings in this direction have been made in health and education and are currently under way in other areas, including crime prevention and control. ^{123/} The methods used here can be drawn from related fields or devised to meet the special requirements. To serve their purpose, they must take into account the factors significantly affecting crime. These include demographic trends, particularly prospective age distribution; rural-urban migration rates; education in relation to vocational opportunities; labour and leisure economics; value systems and family dynamics; and developments in tourism, science and technology (including transport and mass communications).

122. While techniques such as extrapolation provide a setting for the analysis of social reality, their quality and usefulness depend on the availability and validity of basic statistics, which are often inadequate, ^{124/} and on the number of variables taken into account. They also assume that current trends will continue into the future. The rapidity of change makes this assumption questionable. Furthermore, traditional projections usually deal only with limited aspects of the situation and do not raise broader questions concerning the prevailing values and social and economic structures and institutions.

^{123/} See for example, Leslie T. Wilkins, "Crime and criminal justice at the turn of the century", Annals of the American Academy of Social and Political Science (July 1973), and "Crime and crime control in the next ten years", Delphi study prepared for the Fifth United Nations Congress on the Prevention of Crime and the Treatment of Offenders; Denis Szabo, "The post-industrial society, deviance and crime: diagnosis and prognosis for the year 2000", Paper prepared for a conference of the "Futuribles" International Association, Paris, 13 December 1973; Council of Europe, European Committee on Crime Problems, Methods of Forecasting Trends in Criminality (Strasbourg, 1974). P. Jepsen "Forecasting the volume and structure of future criminality", Report presented to the Fourth European Conference of Directors of Criminological Research Institutes, Collected Studies in Criminology (Strasbourg, 1969), pp. 25-212; P. Törnudd, "Forecasting the trend of criminality: a preliminary investigation in Finland", ibid., pp. 213-241; and V. V. Orekhov, Sotsyal'noe planirovaniye i voprosy borby s prestupnostiyu /Social planning and the fight against crime/ (Leningrad, Izdatel'stvo Leningradskovo Universiteta, 1972), p. 47.

^{124/} However, there are sampling techniques and other ways of forecasting from incomplete but representative data. See, for example, Manual for Methods of Estimating Basic Demographic Measures from Incomplete Data (United Nations Publication, Sales No. 67.XIII.2).

Some of the other methods also have their particular constraints. Mathematical models developed in economic and technological forecasting imply certain attitudes on the part of the society they describe. These, however, are probably a complicated function of other social and technological changes. More refined techniques, such as the cross-impact matrix method, use an experimental approach by which the probability of each item in a forecast set can be adjusted to reflect judgements relating to potential interactions of the forecast items. ^{125/} It has been suggested that a general theory of cross-impact which is not yet available would almost certainly permit the exploration of the side-effects of decisions under consideration. Such a theory might also be useful in identifying less expensive means of attaining goals through investments in high pay-off areas which initially seem to be unrelated or only weakly linked to the decision.

123. The limitations of the more traditional forecasting techniques have also led to the concept of "social prognosis" ^{126/} which, rather than seeking to describe the future as such or using various hypotheses in considering different possible alternatives of future development, attempts to show the connexions between possible future and present sets of choices. This kind of prognosis includes projections carried out with regard to already known, analysed and generally quantified phenomena, but it also stresses those that are latent, implicit and very often either not quantified or not quantifiable. Many of these - for example, the likely consequences not only of escalating crime but also of crime control policies - are not explicitly taken into account by decision makers yet are vital for any sound long-term (and even medium-term or short-term) planning. In deliberately setting out to be exploratory and to examine possible alternatives, prognosis considers more radical changes in kind as well as in quantity. It therefore offers a wider variety of choices. Prognosis may deliberately assume changes in structure and endeavour to analyse the conditions of change. It thereby takes a more comprehensive view and tries to envisage the over-all pattern of interrelations between the various components of an economic and social system.

124. Much more research is evidently required if the potential of these approaches is to be fully exploited and their application to particular fields of concern and problems, such as those of crime and its prevention, further developed and refined. Special attention might well be paid to certain aspects of this work - for example, the practical needs that these approaches can serve; the analysis and evaluation of the relationship between them and the process of decision making (or planning); and the ways in which the results of the work can be utilized.

^{125/} Theodore J. Gordon, "The current methods of future research", in Albert Somit, ed., Political Science and the Study of the Future, 1973.

^{126/} See G. A. Awanieszow, "Zagadnienia prognozowania kryminologicznego i kierowania procesem walki z przestępczością (Criminological prognosis and planning for crime control), Przegląd Penitencjarny, No. 3 (35), pp. 26-35; United Nations Research Institute for Social Development, Social Prognosis: Introductory Note and Conclusions of an Expert Meeting, Report No. 70.19 (Geneva, February 1970); Waldemar Rolbiecki, "Prognostication and prognoseology"; and V. Bestushev-Lada, "Social prognostics research in the Soviet Union", in Robert Jungk and Johan Galtung, eds., Mankind 2000 (Oslo, Universitetsförlaget, 1969), pp. 278-285 and 299-306.

III. PLANNING TO MINIMIZE AND REDISTRIBUTE THE COSTS OF CRIME

A. The planning perspective

125. The relationship between unplanned or unbalanced development and increasing crime, which may nullify some of development's hard-won gains, has been touched on before and has been dealt with more extensively in earlier United Nations reports. ^{127/} Most national plans define their ultimate objective as being the provision of a better life for their people. This has called for certain basic structural reforms designed to ensure economic growth and a fairer distribution of increased incomes, as well as improved social investments. However, these have usually been concentrated in the traditional sectors of health, education, labour and welfare, and even here little attention has generally been given to the interrelationship between them which tends to make unequal rates of development of the different sectors (for example, education and employment) counterproductive. Indeed, the rate of increase in crime deriving from such imbalances may serve as an indicator of the degree of dysfunctionality of the system by which it was produced.

126. It has commonly been assumed that higher standards of living, including wider access to education, better health and social services would automatically reduce or act as safeguards against increases in crime. But this has not been the case. Material improvements and distribution measures are essential for more fulfilling growth, but crime is essentially a behavioural problem that is only partially responsive to them. Furthermore, extreme care must be taken so as to minimize possible imbalances and negative side-effects of such improvements which may be criminogenic in themselves, leading to greater social injustice and a lower rather than a higher quality of life. Unfortunately, most planning endeavours have treated the cost of crime prevention merely as a recurrent overhead expense. As it is difficult to include the cost of crime in traditional approaches to the distribution of resources and national accounting, the substantial expenditures on crime control have in most countries been either excluded altogether from, or been kept strictly peripheral to, development thinking and development planning.

127. What is normal or abnormal in a particular society - including its levels of crime - depends of course on many factors, including the levels of tolerance. But it may be assumed that all countries would subscribe to the objective of wishing to achieve growth without malignancies. While the problem and the action directed towards it may vary and may often be a matter of degree, programmes devised without adequate reference to such potential or already existing malignancies are manifestly unrealistic. Recent planning initiatives in several countries show a movement towards a more integral conception of crime prevention

^{127/} See E/CN.5/C.3/R.4/Rev.1; A/CONF.43/1; and A Policy Approach to Planning in Social Defence (United Nations publication, Sales No. 72.IV.9).

as part of the over-all national planning effort. ^{128/} But even where the principle in integrated planning is recognized, much remains to be done in evolving and defining methodologies and techniques by which it can be most usefully implemented. Initiatives at the national, regional and interregional levels should help significantly in this respect.

B. The planning process

128. The planning process may be defined as consisting of the identification of goals, assessment of the extent to which actual conditions deviate from these goals, and development of a general framework of strategy for achieving convergence between goals and existing conditions, a schedule for doing so, the designation of individuals responsible for carrying out the activities and the specification of the required human and financial resources. Evaluation and feedback techniques permit the improvement of planning. Some of the reluctance of planners to deal with crime prevention and control has stemmed from the political issues involved. But these issues have also been exploited in campaign slogans without planned follow-up. The task is complicated by the fact that the first step in planning, that is, the identification of critical issues (behaviour, processes, conditions and consequences apparently associated with acts legally defined as crime), is not only crucial but still disputed. Lack of an adequate data base complicates efforts to assess the real impact of crime, as does the need to take into account community evaluation of the different kinds of behaviour and the means deemed necessary to control it.

129. The next stage of planning, the elaboration of alternative strategies, is directed towards selecting those programmes and approaches considered to be most effective (in cost/benefit terms) in preventing crime compatible with the fundamental values of the particular society and the aims of government policy. The overriding concern would be to mitigate and as far as possible to forestall the most harmful consequences of crime. Planning for crime prevention must of necessity be both sectoral - that is, as it concerns the criminal justice system - and intersectoral, requiring the incorporation of crime preventive elements in other sectoral or cross-sectoral programmes.

130. Important in the choice among options intended to achieve the planning goals is the assessment of resources, including public and private capabilities, in relation to the various programme alternatives. The relative weight to be given to programme options or the availability of resources will depend upon the economic and social conditions of a particular country, and both will be affected by the quality of personnel, the available facilities and the prevailing attitudes. In the past, less than optimal disposition has been made of available and often

^{128/} Such an approach has been called for in a number of United Nations resolutions (General Assembly resolution 3021 (XXVIII), ECOSOC resolutions 1860 B (XXXIX) and 1584 (L)) and the recommendations of recent regional meetings (see, for example, "Planificación de la Defensa Social en los Países en Vía del Desarrollo: Primeras Jornadas de Defensa Social de América Latina", 5-7 de agosto de 1974. General report by S. C. Versele and papers submitted to the meeting; and report of the Seminar on Social Defence Planning, held at San José, Costa Rica, from 11 to 16 August 1975.

limited resources. This is attested to by the discrepancy between the amount expended and the results achieved.

1. Setting targets

131. As with evaluation, planning relating to crime is complicated by ambiguity and conflict among the various crime control objectives, which is particularly manifest in attitudes towards the treatment of offenders. Purported adherence to principles of rehabilitation, protection of society, prevention of recidivism and so forth, has often served as a rationalization for much more deep-seated and less overtly articulated motives, such as punishment, retribution and the maintenance of a righteous self-image through projection and related mechanisms. The identification of goals and means for achieving them as part of the planning exercise should be helpful in revealing this ambivalence and pinpointing the discrepancies. In turn, this will aid the process of target-setting and programme selection. Above all, the identification of goals will aid in improving the design and rationale of programmes which in the past have tended to work at cross-purposes.

132. While it has been noted that each society will set its particular objectives in accordance with its particular requirements and inclinations, it may be appropriate here to suggest a common framework to be filled in differentially. Rather than concentrating on the reduction of the total volume of crime, it might perhaps be more useful to take action designed to minimize the cumulative effects of crime by selective strategies that focus on those crimes exacting the greatest social cost. The linked objective of redistributing the unavoidable costs of crime more equitably throughout societies so that they might be borne more easily would also reinforce the aforementioned aim, providing a springboard for more just and more viable action.

2. Optimizing the allocation of resources for crime control

133. Planning must necessarily make use of quantitative techniques in the allocation of resources. Approaches developed primarily in economics and long used in the traditional sectors have more recently been applied to allocation of social investments and have finally come to be utilized to make more rational decisions about crime. The expertise of statisticians, accountants, engineers, systems analysts, management consultants and behavioural scientists is now being applied more intensively to a variety of social problems, including that of crime.

134. From the planning standpoint, among the most promising yet controversial new departures from traditional budgeting procedures is PPBS (Planning, Programming and Budgeting System) or the more modest version of "output budgeting", which has been adopted in a number of countries. These methods have aroused some controversy, but both permit a more coherent method of planning. Unlike traditional budgets, which are primarily concerned with allocating funds to administrative units in the light of previously submitted requests for resources, these innovative methods permit planning for several years ahead, taking into account all available resources, to achieve certain postulated goals through the implementation of appropriate programmes and projects. This approach, which is closely related to and makes extensive use of cost/benefit techniques, seems to

have special relevance for dealing with activities designed to minimize and redistribute the cost of crime.

135. Recourse to cost/benefit calculations is necessary in making choices between the various options available for achieving established goals. While "costs" and "benefits" could be interpreted narrowly in relation to crime, their usage in the broader sense would seem more appropriate, mirroring the wider ramifications involved in the computations of the cost of crime which entail not only immediate costs but also externalities and opportunity costs, as well as the discounting of future costs. 129/

136. The programme budgeting approach has been applied to certain aspects of crime control in countries such as France, Sweden, the United Kingdom and the United States of America. 130/ In some countries, such as Italy, there have recently been introduced innovative approaches to the measurement and improvement of the quality of life and the optimization of the allocation of resources, utilizing in an integrated manner such quantitative techniques as social indicators, economic and social accounts, programme budgeting, modelling and systems analysis. 131/ In Italy also there have been pioneering attempts to apply cost/benefit analysis to the administration of justice. 132/

137. In selecting from among policy alternatives and in establishing priorities for the investment of the limited resources available for crime and delinquency control and prevention, the economist's tools, such as cost/benefit analysis offer significant scope. Recent efforts to demonstrate that optimal policies to combat illegal behaviour are part of an optimal allocation of resources have resulted largely from the recently manifested interest of economists in problems of crime

129/ These concepts refer, respectively, to (a) costs (or benefits) external to the primary act or process, (b) anything material or non-material that is given up to obtain something else or to take an alternative course or action, and (c) the present value of something that is worth a given value in the future.

130/ For a detailed analysis of these, see "The application of modern techniques of resource allocation", Reports by J. P. Martin and Robert Anderson, respectively, presented to Working Party Twenty-three of the Council of Europe (Strasbourg, 1972).

131/ Franco Archibugi, "A progress report: the quality of life in a method of integrated planning: aspects of an Italian research project 'Progetto Quadro'", Socio-Economic Planning Sciences, vol. 8, No. 6 (December 1974), pp. 339-345; G. Marbach, "Social indicators for planning operation in justice" with appendix by Giuseppe di Gennaro, "Planning and justice: preliminary considerations of the need for reform of social defence".

132/ C. Castellano, C. Pace and G. Palomba, L'efficienza della giustizia italiana e i suoi effetti economico-sociali (Bari, Laterza, 1970) and F. Forte and P.V. Bondonio, Benefici della giustizia italiana (Bari, Laterza, 1970). Sponsored by the Centro Nazionale di Prevenzione e Difesa Sociale.

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and criminal policy, which has led to the use of economic analysis in developing models for selecting optimal public and private policies for combating crime. ^{133/}

138. Some problems, however, arise in using this approach, probably because the most decisive factors tend to belong to the least quantifiable category of social costs and benefits. The use of formalized methods of cost/benefit analysis narrows the scope of the analysis. But, while qualitative factors can, within certain limits, be included in formal optimization models, such models do not quite satisfactorily correspond to the real-life situation; a large number of decisive variables will have to be left outside the formal analysis even though they are taken into account in the final decision making. There is a certain risk that preoccupation with those variables which most easily fit into formalized models will influence the thinking of policy makers and researchers. For this reason, formalized cost/benefit calculations should, if possible, be balanced with statements indicating awareness of social costs and benefits in a larger sense. There is no limitation to the nature of costs or suffering which may be included in, for example, a "profile comparison" of various policy alternatives. The data and results obtained by cost/benefit-oriented research can be put to productive use in countries where the system of crime prevention and the administration of justice are based on formalized and sophisticated methods of guiding decision making, such as systems analysis, operational research and so forth. Such over-all systematization is, however, not a prerequisite for the use of cost/benefit methods, and developing countries seeking to maximize their scarce skilled manpower and material resources may derive particular advantage from the use of this approach.

139. Future work on cost/benefit analysis as applied to crime control policies and programmes could usefully focus on two main aspects: the identification and classification of the sources of costs and benefits, and the definition of the relationship between economic and non-economic measures of value. ^{134/} The first step, that of identifying and classifying the sources of costs and benefits, should probably be as comprehensive as possible without being excessively detailed. The costs and benefits considered would include the costs of the criminal justice

^{133/} See Henry Tulkens and Alex Jacquemin, "The cost of delinquency: a problem of optimal allocation of private and public expenditures" (Catholic University of Louvain, Centre for Operations Research and Econometrics); and Strafrecht en Economie, Verslag van een Symposium, Rotterdam, 27 February-1 March 1975. For surveys of the literature, see Samir Razkalla, and others, The Economics of Crime and Planning of Resources in the Criminal Justice System: Bibliographical Guide (Montreal, International Centre for Comparative Criminology, April 1975; Richard F. Sullivan, "The economics of crime: an introduction to the literature, Crime and Delinquency, April 1973; and K. Lindby, "Some economics of crime and crime control", in Canada, Department of the Solicitor General, The Cost of Crime and Crime Control: Analysis of the Work of the Second International Symposium in Comparative Criminology (Ottawa, 1971).

^{134/} Stephen L. Brown, An approach to the measurement of the costs of crime (Menlo Park, California, Stanford Research Institute, December 1969). A problem of continuing interest is the relationship of social marginal benefits to social marginal costs.

system in the prevention and handling of crime; losses to the public due to crime, including both economic and non-economic costs; loss of freedom or justice due to intensified action against crime; benefits of reduced crime by directly reducing losses; benefits and costs of reduced crime in social indicator areas other than public safety; and benefits of crime reduction by social measures not specifically directed towards crime control. The classification of these costs and benefits would preferably be in functional terms (that is, pertaining to crime prevention, deterrence and punishment - if that notion persists), as well as in terms of effects (individual economic effect, individual psychological effects, social interactive effect and so forth).

140. With this basic taxonomy in mind, the task of relating economic to non-economic measures of value can be approached. The direct economic costs and benefits of crime control programmes can in principle be determined in a relatively straightforward manner, but the determination of a value scale for non-economic costs poses substantial problems, particularly since in order to establish understandable measures of effectiveness, the non-economic costs and benefits must be assigned values compatible with the economic ones. Although the idea of placing monetary value on such priceless things as a human life or health may be abhorrent to many, it is done in practice when policies which would potentially condemn some lives in the process of saving the great majority of those involved are adopted, or when potentially life-saving ones are foregone - not to speak of workmen's compensation or insurance awards. Studies of this kind of value judgement and others (for example, court awards in civil damage suits, insurance and individual trade-off behaviour) might be conducted. Conceptual ways of establishing relationships between the different types of costs need to be developed and methods of appropriate data collection and analysis proposed.

3. Monitoring progress in plan implementation

141. Even the most cogent plan may fail if it is not properly implemented. While the "execution" of the plan refers to the carrying out of the specific tasks envisaged under it, plan "implementation" in the wider sense covers not only execution but also co-ordination and control, as well as follow-up, evaluation and revisions of plans in the light of the evidence at hand. Ongoing evaluation - an essential aspect of planning - is crucial to ensuring its success. This requires the close co-operation of researchers, planners and implementation as well as an interdisciplinary effort involving criminologists and others whose expertise can contribute to planning for more wholesome development that minimizes the social cost of side-effects such as crime.

142. Some countries have made significant progress in this regard. In Japan, a plan for crime prevention is being implemented as part of the Kashima development project. A team of planners and researchers has been analysing the social changes connected with the area's rapid development and its crime trends and has initiated crime prevention programmes that are to be carried out in co-operation with the local residents as an organic part of Kashima's development

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plan. ^{135/} In the Union of Soviet Socialist Republics, crime prevention is deemed to be an inextricable part of larger planning concerned with the provision of optimal socio-economic and cultural conditions. It is carried out also through an educational policy that is designed to foster moral education and a respect for the law, and relies on public participation to achieve maximum success. In addition, there has been a concerted effort to incorporate crime prevention features in the planning of new towns so that rapid development can proceed without undue social cost. In Divnogorsk, Tolyatti, Surgat, Bratsk, Angarsk and other rapidly industrializing areas, this kind of planning strategy has proved successful; there have been no increases in crime (and often a decrease) in spite of substantial population growth (tenfold, for example, in Divnogorsk). The success in achieving this kind of functional growth is attributed to the range of social and economic measures taken and the services and amenities provided, coupled with the activity of public and social organizations (including the militia) in preventing crime. Continuous monitoring of the situation permits the intensification of measures wherever necessary, as in the case of Leningrad, whose reduced crime rate attests to the viability of the approach. ^{136/}

143. In several West African countries, efforts had been made to initiate over-all research and planning for crime control. The African regional meeting of experts held in preparation for the Fifth United Nations Congress on the Prevention of Crime and the Treatment of Offenders unanimously recommended that an African regional centre be established under United Nations auspices. ^{137/} Its work, like that of the other regional institutes, should contribute to the assessment of progress in moving towards the planning goal of anticipating and mitigating the deleterious consequences of crime.

^{135/} See report of the Government of Japan on its activities in the field of the prevention of crime and the treatment of offenders (24 February 1975), p. 508.

^{136/} Paper prepared for the Fifth United Nations Congress on the Prevention of Crime and the Treatment of Offenders by B. A. Victorov, Deputy Minister of the Interior of the Union of Soviet Socialist Republics, 1974. See also V. V. Orekhov, Sotsyalnoye planirovaniye i voprosy borby s prestupnostiu (Social Planning and the Fight against Crime) (Leningrad, Izdatelstvo Leningradskovo Universiteta, 1972), p. 133; and I. I. Karpets, "Metodologicheskie osnovy izucheniya prestupnosti i planirovaniye mer borby s neei v sotsialisticheskoy obshchestve" (Fundamental methodological principles in the study of crime and the planning of measures to combat crime in a socialist country), in Printsipy podkhoda k planirovaniyu mer sotsialnoi zashchity (A Policy Approach to Planning for Social Defence) (United Nations publication, Sales No. 72.IV.9), pp. 96-122.

^{137/} See report of the African Regional Preparatory Meeting of Experts on the Prevention of Crime and the Treatment of Offenders, Lusaka, Zambia, 17-21 March 1975 (A/CONF.56/BP/4), pp. 12-13; and Ives Brillon and Denis Szabo, "Criminalité, planification de la prévention du crime et services de traitement des délinquants: le cas de l'Afrique de l'Ouest" (Montreal, Centre International de Criminologie Comparée, décembre 1973), p. 91.

C. Minimizing the costs of crime and crime control

144. The task of reducing the costs of crime is admittedly a difficult one, particularly since there are no clear-cut answers and proven strategies to guarantee success. The refractory state of affairs in all too many places attests to its complexity and the failure of ready and simplistic solutions. It is precisely because of this complexity and the ever-changing configurations of crime that there are no easily arrived at prescriptions. If the problems involved have here been oversimplified at times, it is not owing to unawareness of their intricacy but rather to a conscious attempt to draw attention to aspects not adequately or consistently emphasized and which have thus escaped redress. Out of the range of possible options - some available, others yet to be evolved - only a few have been highlighted, and others touched upon which need to be more intensively pursued. The purpose has been not so much to propose specific courses of action or to make recommendations as to trace possible approaches and perspectives which in varying combinations may be useful in charting a more meaningful and, hopefully, a more productive course. The use of quantitative techniques as tools of planning should help to rationalize the process, optimizing the allocation of resources and reducing as far as possible the social cost of crime and crime control.

1. Reducing opportunities for committing crimes

145. While long-range preventive action designed to reduce the cost of crime may ultimately have to be sought through social innovation and institutional change within the framework of integrated long-term planning which takes account of the psychological, social, economic and political forces at play, some direct safety measures can be taken to reduce occasions for the perpetration of crimes.

146. Opportunities for committing crimes can be diminished by physical means, ranging from burglar alarms and better street lighting to encouraging such safety precautions as locking cars or not walking in high crime areas at night. In some places, building codes contain security clauses. Some find this "target-hardening" approach somewhat simplistic. They argue that technological improvements in security challenge the potential offenders' ingenuity; that in spite of the large-scale investment in better lighting in some areas, its effectiveness in deterring crime has not been scientifically established; that it is impossible to control the myriad possibilities for crime which modern life presents; and that as long as the social conditions favour it, opportunities for committing crime will be found. Nevertheless, in devising a multipronged preventive strategy, it may be prudent to give this approach its due, reducing at least visible temptation. The matter is not as simple, however, as it may seem, and precautionary measures sometimes are not taken because of the trade-offs involved. 138/

138/ For a cost/benefit approach to security devices, see W. Kriger and A. L. Swift, "A method for quantitative evaluation of burglary resistance", Socio-Economic Planning Sciences, vol. 8, No. 6 (December 1974), pp. 347-351; and Michael I. Liechtenstein, Reducing Crime in Apartment Dwellings: A Methodology for Comparing Security Alternatives (New York, Rand Corporation, 1971).

147. There is an analogue in the issue of gun control. While admittedly "people, not guns, kill people" (as some of the opponents of laws to control the use of guns point out), the ready access to a weapon under conditions of emotional stress facilitates the relatively easy and efficient consummation of an act that may otherwise not have occurred or not have been fatal, and the presentation (through the media, for example) of models for their use, may have a disinhibiting effect contributing to the vicious circle of violence which increasingly occurs. 139/

148. More structured efforts may involve the altering of housing and community environments through architectural planning, remodelling of old structures, increasing levels of citizen surveillance or initiating other kinds of programmes that make criminal activity a high-risk action. High-rise buildings with their anonymity, and low-cost housing schemes which lack adequate security features and tenant involvement are propitious targets for crime. Through a first-hand analysis of housing projects across one country, a model for residential environments has been developed which incorporates ingredients in their physical design deemed to be crime-inhibiting and instrumental in counteracting the "deterritorialized" existence in contemporary cities. The selection of design aggregates for this model is directed towards isolating those mechanisms which allow residents themselves to assume responsibility for ensuring a safe, productive and well-maintained living environment, and at thwarting the criminal's initial recognition of opportunity. The concept of "defensible space", 140/ which groups dwelling units in a particular way and which delimits paths of movement by defining areas of activity and in juxtaposition with other areas, provides for visual surveillance and helps to instill in tenants and strangers alike a clear understanding of the function of space and its intended uses. It is hoped that this approach will lead to the adoption by residents, regardless of income level, of strong territorial identifications with their environment, including the acceptance of self-policing measures. It represents an imaginative application of the knowledge that the kind of physical environment can evoke particular attitudes and behavioural responses from both inhabitants and outsiders and can set the framework for a life-style which by its very nature will create a buffer against intrusion while ensuring its intensive use.

149. The principle has wider application. Surveillance of exterior non-private areas (such as play areas) can be increased by juxtaposing them with interior areas

139/ See also Llad Phillips, Harold L. Votey, Jr. and John Howell, "Handguns and homicide: minimizing losses and the costs of control" (University of California at Santa Barbara, 1974).

140/ Oscar Newman, Defensible Space: Crime Prevention through Urban Design (New York, MacMillan, 1972), and Architectural Design for Crime Prevention (Washington, D.C.); United States of America, National Institute of Law Enforcement and Criminal Justice, Deterrence of Crime in and Around Residences, Proceedings of the Fourth National Symposium on Law Enforcement Science and Technology, conducted by the Institute of Criminal Justice and Criminology, University of Maryland, 1-3 May 1972 (Washington, D.C., 1973); National Institute of Law Enforcement and Criminal Justice, Urban Design, Security and Crime, Proceedings of a National Institute of Law Enforcement and Criminal Justice Seminar, 12-13 April 1972 (Washington, D.C., 1972); and W. Farley and M. Liechenstein, Improving Public Safety in Urban Apartment Dwellings: Security Concepts and Experimental Design for New York City Authority Buildings (New York, Rand Institute, 1971).

of activity. Similarly, the juxtaposition of housing projects with safe city areas will minimize risks and anxieties within the project grounds through increased human traffic. Its limits, however, may need to be determined from the standpoint of privacy as an essential human right. A balance also has to be maintained so that security installations do not create a fortress-like appearance which would contribute to, rather than dispel, an atmosphere of insecurity and fear. The way probably lies in inventive approaches and designs developed by interdisciplinary teams of architects, behavioural scientists (including criminologists), urban planners and others, which would take these various elements into account. As a prescription, it may also be the way to more satisfactory urbanization. ^{141/} This applies not only to residential design, but also to the planning and management of shopping centres, recreational facilities and banks. ^{142/} Furthermore, surveillance alone is patently not enough, as experimental studies have revealed. ^{143/} It must be reinforced by public willingness to participate in the prevention and control of illicit behaviour, by signs of disapproval, direct intervention or enlistment of assistance from the authorities in controlling such behaviour. Combinations of physical and human controls (for example, vertical patrols, tenant patrols) can promote this objective. The impact of the physical environment on attitudes and behaviour is a fruitful field for study which has only recently begun to be scientifically explored. The concept of personal space has its psychological as well as physical dimensions and its denial, more than overcrowding, may have a frustrating, tension-building effect. Vandalism by youth in deteriorated neighbourhoods may represent a disclaimer of that environment and a symbolic attempt to make it disappear. The upsurge of interest in prison design ^{144/} has stemmed in large part from the recognition that an oppressive physical environment may be aggression-provoking and thus may countermand the socializing objective which correctional treatment has set out as one of its declared aims.

150. The reciprocity between physical and social space also needs to be more extensively explored. Crime increases which have often accompanied slum clearance projects and their replacement with impersonal, cohesion-lacking housing developments provide a lesson in this respect. The dynamics of human settlements at the micro and macro levels require study and creative application, so as to

^{141/} John E. Conklin, The Impact of Crime (New York, MacMillan, 1975), pp. 148-149.

^{142/} Jean Bellemin-Noel, "La prévention du banditisme dans les établissements financiers de France", Revue internationale de criminologie et de police technique, vol. XXVII, No. 3 (July-September 1974), pp. 112-128.

^{143/} S. Rizkalla and R. Bernier, "Les vols d'autos, aspect coût-bénéfice: Incidence criminelle, action policière et modèle d'évaluation" (Montreal, Centre International de Criminologie Comparée, University of Montreal, 1973).

^{144/} See, for example, Edith Flynn, Guidelines for the Planning and Design of Regional and Community Correctional Centres for Adults (Illinois University, Department of Architecture, 1971); and United Nations Social Defence Research Institute, Prison Architecture (London, Architectural Press, 1975).

provide real living space, in terms of amenities, community facilities and opportunities for significant interpersonal contacts. Housing developments can be built so that tightly knit communities similar to those existing in traditional societies or small towns can be created in urban settings. The experience of certain tribal communities and behavioural knowledge point to the fact that it is the nature of communities rather than just their size and the quality of the relationships within them which determine the degree of social control. The time is ripe for multilevel planning designed to minimize the criminogenic potential of human settlements and maximize their capacity for sustaining more integral psycho-social development and more satisfactory human interchanges, providing a climate conducive to shared action in matters of mutual concern.

2. Increasing legitimate options

151. There are obviously no simple formulas that will ensure crime cost reductions, although certain directions for action seem to emerge. The tendency towards monocausal explanations ^{145/} has all too often resulted in simplistic approaches purporting to deal with the "basic problem" involved. The array of remedial measures which have proved ineffective - occasionally at considerable expense - is testimony that such a constricted vision and focus of activity are not only inherently flawed but also counterproductive. It is evident that specific preventive and recuperative strategies must be geared to the dynamics of particular crime problems in their respective contexts, and that this involves action at a number of levels. Expanding the range of legitimate options available to individuals and groups represents action at one of these levels.

152. This strategy may also be considered somewhat simplistic if the provision of legitimate opportunities per se is construed as delinquency proscriptive. ^{146/} The purpose here is not to compare different kinds of prevention, for example, primary or secondary, or to contrast it with a posteriori action. These distinctions, like other taxonomic devices, camouflage the fluidity and overlap between such concepts and may obfuscate the task of mapping viable intervention strategies. The intention is rather to trace some of the main directions which action designed to reduce the excessive cost of crime might take, acknowledging the fact that these directions are many and that it is their recurrent, convergent and interactive effect that can be expected to exert some kind of impact. How this is to be achieved is one of the prime challenges facing planners.

^{145/} For a more sophisticated interpretation which seeks to take into account the complexity of criminal phenomena, see Jan Gorecki, "Crime causation theories: failures and perspectives", British Journal of Sociology, vol. XXV, No. 4 (December 1974), pp. 461-477.

^{146/} This is not to imply that attempts to link the two made, for example, by Cloward and Ohlin in their Delinquency and Opportunity (New York, Free Press, 1970) may have suffered from this fault; on the contrary, their focus has given an added dimension to discussions of the dynamics of delinquency and delinquency control.

153. One of the basic human requirements is the opportunity to work. Here, again, there is a danger of oversimplification. Economists who have stressed the demand and supply function of licit and illicit opportunities and critics of the social order prevailing in market economies have tended to emphasize the connexion between unemployment and crime. ^{147/} The relationship, if it exists, is likely to be far from linear and numerous variables are involved. But the lack of productive work opportunities is admittedly personally frustrating and socially disruptive, as well as being economically damaging.

154. The situation in the teeming towns of Africa and other developing regions is socially explosive; large numbers of youths drift about, caught in the disparity between heightened expectations derived from wider education and the message of the mass media and the dearth of employment opportunities of the kind depicted as most desirable (for example, white-collar jobs). Policies to make rural areas more attractive have often failed to stem youth's trek to towns, and better village schooling has often merely hastened it by making the reality even more oppressive. The failure to integrate educational and manpower planning has had its repercussions. The large numbers of young people concentrated in the towns without mainstay or social support to replace weakening family and traditional controls are a powder keg, and unemployment and underemployment are increasing in many areas of the world. ^{148/} More than only sustenance is at stake. The whole question of belonging, purpose and structure in one's daily environment and life-style are critically involved. ^{149/}

155. Even where employment has been plentiful, studies of job satisfaction and productivity reveal the price paid for the lack of meaningful and fulfilling work experience. The risk involved in criminal activity and its occasional easy gain may well be attractive compared with the dull routine of much of the fragmented, depersonalized work scene of today. More even than the stimulus of possible risk, the proclivity towards crime reflects perhaps a desperate attempt to achieve

^{147/} See, for example, Belton Fleisher, The Economics of Delinquency (Chicago, Quadrangle Books, 1966); Ian Taylor, Paul Walton and Jock Young, The New Criminology (London, Routledge and Kegan Paul, 1973); and M. G. Giannini, "Economia e criminalita", Apunti di Criminologia (Rome, Bulzoni, 1969).

^{148/} In Africa open unemployment rates of 15-20 per cent by 1980 are projected relative to an urban population increase of 50 per cent and increasing inequality. Proposals for counteracting this situation have called for a change in planning objectives from maximizing growth to maximizing human potential, and change in economic organization from a system based on inequality to one of greater equity and social justice in order to avoid a constriction of freedom, violence and ultimate disaster. See John Friedman and Flora Sullivan, "The absorption of labour in the urban economy: the case of developing countries", Economic Development and Cultural Change, vol. 22, No. 3 (April 1974), pp. 385-413.

^{149/} It has been emphasized that participation in the labour force rather than merely employment or unemployment as such is especially relevant to delinquency and its prevention. See Llad Phillips and Harold L. Votey, Jr., "Crime, youth and the labour market", Journal of Political Economy, vol. 80, No. 3 (May-June 1972), pp. 491-504.

an identity which the legitimate avenue denies. That the problem is more acute among marginal sections of the population is to be expected, for lacking the advantages and the opportunities they generally also lack the skills and the impetus to overcome their situation, and only rarely is there sufficient mobility to overcome the inherent handicaps. For the ex-offender, marginal from the outset or marginalized, the odds are heavily against him. Starting usually with limited skills, his prison work experience rarely equips him for the outside job market. He has little to lose in terms of opportunity costs; the self-perpetuating circle is endemic to the recidivism process. Attempts to offset or, preferably, to prevent such handicaps are crucial to the reintegration process. 150/

156. Even where public services are provided, they are often not properly distributed, so that their delivery to the segments of the population needing them most is most seriously impeded. Equitable distribution of services does not necessarily mean the allocation of an equal amount of resources among all areas or population groups, but, rather, allocation according to need, so as to maintain equally effective services. It also means reaching out, disseminating information and otherwise increasing accessibility for those who may not otherwise avail themselves of the facilities provided. It may also be necessary to overcome bureaucratic procedures, lack of co-ordination 151/ and various forms of resistance and to create attitudes conducive to the creative utilization of services provided and to self-help activities 152/ which are more consonant with concepts of human dignity than passive donor-client relationships. This includes particularly vulnerable target populations and problem groups which require some equalization of options open to them.

157. Innovative policies for out-of-school and continuing education would advance equity as well as promote more efficient utilization of human resources. 153/ This may mean an overhauling of the educational system which has largely failed to

150/ Legislative provisions barring discrimination against ex-offenders (for example, as in Poland) are important in this respect; bonding arrangements or other guarantees to prospective employers can also prove useful.

151/ There have been proposals that neighbourhood facilities such as multiservice centres and "little city halls" be established to facilitate the dispensing of government services and to improve communication between citizens and government agencies. These centres would provide a variety of government services in one location so that local residents could use services close to their homes with the minimum of bureaucratic entanglement. See United States of America, National Advisory Commission on Criminal Justice Standards and Goals, Community Crime Prevention (Washington, D.C., 1973), p. 42.

152/ The Ujamaa communities in Tanzania, the harambee movement in Kenya and self-help activities undertaken spontaneously by the inhabitants of the marginal areas of African cities illustrate this principle.

153/ For a consideration of issues of equity and efficiency arising in connexion with educational and manpower planning, see Vladimir Stoikov, The Economics of Recurrent Education (Geneva, International Labour Organisation, 1973); and Mark Blaug, Education and the Employment Problem in Developing Countries (Geneva, International Labour Organisation, 1973).

fulfil its role as an animateur of the human creative and adaptive potential and as a character-builder. The persistence in developing countries of alien, academically oriented models ill suited to the practical needs of national growth and conditions of rapid social change has exacerbated the situation there 154/ and in some developed countries the existing school system has come under attack. 155/ High wastage rates common to developing countries and marginal groups in developed ones tend to raise unit costs and to diminish returns. Instruction has all too often been inappropriate to local realities of life; rather than promoting desirable attitudes and skills conducive to participation in social and economic life, it has accentuated cultural alienation and divisiveness.

158. A revitalization of education as a force for development and social cohesion is urgently needed and has been called for by leaders in this field. 156/ This means curricula geared to national priorities, the application of technological progress in devising innovative teaching methods, the use of organizational forms and approaches which would permit meaningful learning as an aid to reality-testing and adaptation to changing needs, and a concept of education as a lifelong process designed to reach everyone regardless of age and previous learning history (for example, school drop-outs). By providing sufficiently varied options to meet different interests and aptitudes, a more organic relationship can be established with manpower requirements as well as individual aspirations. 157/

159. The role of the school as transmitter of indigenous values and ethical norms can be much more fully exploited, with room for questioning as a part of moral

154/ See, for example, Majid Rahnema, The Problem of Education in Developing Countries: A Vision of the Future School in Learning Society (1974).

155/ Nils Christie, Hvis Skolen Ikke Fantes /A society without a school/ (Oslo, Universitetsforlaget, 1972).

156/ This is reflected in the emphasis of countries such as Burma on "education linked with life", of Tanzania on "education for autonomy", of Peru on "education geared to the needs of national development and increased community participation" and of the "école de promotion collective" movement in some French-speaking African countries. See for example, A. M'Bow "Education in the Third World: problems and prospects", Opening address to the International Symposium on Educational Strategy for the Third World: Innovations and Prospects for Action, Ottawa, 8 April 1975.

157/ The International Labour Organisation has recommended that its members adopt and develop comprehensive and co-ordinated policies and programmes of vocational guidance and vocational training, closely linked with employment in particular, through public employment services. International Labour Organisation, Human Resources Development: Vocational Guidance and Vocational Training, Report VI(2) presented to the International Labour Conference, sixtieth session, 1975, p. 56.

training. ^{158/} The school could be used much more effectively to foster the socialization process, inculcate non-violent, co-operative attitudes and serve as a testing ground for different ways of conflict resolution. The use of the school as a spearhead of community action could be more widely expanded to foster that measure of popular participation in national life which is most conducive to sustained growth. This is particularly true of disadvantaged segments of the population and of population groups such as youth and women which have often been excluded from full participation. Often this represents the majority of the population. The vulnerability of youth to crime is amply documented; the rising rates of female crime give cause for concern. The fact that the masses of the population in the various regions of the world have remained on the periphery of development is a tragedy facing not only national leaders but the conscience of the world. ^{159/} There is need for participation by all segments and levels of the population in important areas of national life and in decision making to permit identification, common interests and a sense of sharing. Again, to utilize the economists' perspective (and with due regard to its limits), perhaps the stakes which those at the margin have in licit conduct should be increased so that they will hold on to them. One of the critical questions facing planners and politicians is precisely that; how to increase these stakes so as to raise the threshold of those who may be apt to veer the other way.

3. A more rational^{160/} system of social criminal justice

160. The aim here is not to deal in detail with the subsystems of the criminal justice "system" but rather to suggest directions in which policy making and

^{158/} Experiments in moral education as part of the regular school programme are being tried in some countries, and the development of alternative schools designed to promote moral development is also being explored (e.g., the "just community school" in Cambridge, Massachusetts). See Edward B. Fiske, "The schools now place value on developing personal values", New York Times, 25 May 1975, p. 6. The systematic inclusion of legal education in school is becoming a regular feature of the Soviet educational programme. See "Grazhdanin i pravo: nachinat' s shkoly" /The citizen and the law: begin with the schools/ Pravda, 28 January 1975, p. 3.

^{159/} "Greater equality and social justice require a greater measure of popular participation. Development based on models, structures and technologies imported from abroad has no roots in the population; and development which has no roots in the population merely becomes development by an élite for an élite." International Labour Organisation, Human Dignity, Economic Growth and Social Justice in a Changing Africa: Report of the Director-General (Geneva, 1973), p. 41.

^{160/} The term is used here in the sense that "a means may be called rational in so far as it maximizes the chances that the object of the effort will be obtained safely with the lowest possible expenditures in terms of money and human suffering". See K. O. Christiansen, "Some considerations on the possibility of a rational criminal policy", in United Nations Asia and Far East Institute, Annual Report, 1973, p. 75.

planning in this area might move if the social cost of crime is to be minimized and spread more evenly than it now is.

161. The overreach of the criminal law and its tendency to lag behind changing social reality has been pointed out repeatedly but has resulted in little tangible action. The natural obsolescence of laws necessitates that they be constantly reviewed and attuned to altered conditions and values, and mechanisms are required to make this a systematic process based on empirical evidence. In some countries, legal policy has been making increasing use of the results of research in criminal law and researchers plan an organic role in policy making. 161/

162. Legislative emphasis on serious crime, which exacts the greatest social cost, is required, as are alternative ways of handling a variety of behaviour forms and acts which do not inflict substantial damage on others or on society as a whole. Many laws have either direct or indirect consequences which increase the social costs. Drug-related laws and laws against abortion tend to create conditions for black markets; laws against homosexuality may give rise to blackmail and to other negative economic and social consequences. Some laws (for example, those on gambling and prostitution) may not only create black markets for the prescribed services or commodities but also promote the formation of monopolies by highly organized exploitative elements. There are added social costs associated with particular laws - the uncontrolled spread of venereal disease by making prostitution illegal, the predatory offences committed to satisfy drug addiction habits.

163. Laws may not be rational in other ways: rather than escalating with the seriousness of an act, the legal sanction may in fact operate in reverse. 162/ For the law to serve as an effective instrument of social control, both the reasonableness of specific normative expectations and the credibility of legal sanctioning in the event of violation must be maximized in the legal beliefs and attitudes of those subject to legal control. Decisions regarding criminalization should be predicated on empirical evidence regarding the impact of the policies adopted. 163/ Experimental innovation and adaptation in the light of the feedback obtained is a pre-condition for ensuring the viability of the criminal law. 164/

161/ This is particularly true of the Scandinavian countries and some others - for example, the Netherlands and Yugoslavia.

162/ This seems to be the case, for instance, in the case of misappropriation where legal sanctioning seems to be higher (more effective) for petty than grand forms of the act. See Austin Turk, "Problems in research on the impact of legislation", in Legal Sanctioning and Social Control (Washington, D.C., Center for Studies on Crime and Delinquency, National Institute of Mental Health, 1972).

163/ See, for example, Hans Zeisel, "Reflections on experimental techniques in the law", Journal of Legal Studies, vol. II(1) (January 1973), pp. 107-124.

164/ See, for example, Göran Skogh, "Straffrätt och samhällsekonomi" /Criminal law and welfare economics/, University of Lund (Sweden) Economic Studies, 1973, pp. 123-138; and P. E. Vivian "Law and social control: a systems approach", (Ottawa, 1969), p. 46.

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Proponents of legal reform which would make the law more responsive and proportionate to the damage inflicted by different categories of crime suggest more selective procedures of criminalization and penalization. The idea would be for the criminal law to concentrate on the more serious acts (from the social harm perspective) and to deal with others differentially, through less severe sanctions or, where possible, by civil and administrative measures, particularly suited to the kind of acts involved (e.g. economic measures to deal with economic crimes). Ideally, preventive strategies would have preference over a posteriori measures (for obvious reasons and because this spreads the cost more evenly throughout society). Again, the focus with respect to definitions of "seriousness" would vary among countries. 165/

164. The deployment of law enforcement personnel would support the objective of focusing on the most socially and economically damaging acts. The emphasis on intensified and expanded police operations as a means of controlling crime can contribute to the dysfunctionality of the criminal justice system as a whole if the activity of its other components is not adjusted accordingly. The courts, usually severely overburdened, may not be able to deal with the added workload, and additional bottle-necks and delays may result. The exercise of the discretionary functions of the police, which should be instrumental in diverting relatively minor cases from the criminal justice system, 166/ may be hampered by the premium placed on aggressiveness in law enforcement. Novel modes and patterns of police utilization, developed with input from behavioural science and recent progress in technology, can aid in combining greater responsiveness to human need with enhanced police effectiveness. Police planning is complicated by the delicate balance which it must strive to maintain while attempting to provide adequate protection that will help to preserve a climate of security without creating the feeling of oppressiveness and resentment of police authority which the intensification of its activity may arouse. There is also the balance between public and private investment and intervention in law enforcement - ranging from fruitful collaboration to excessive responses to a felt need by groups of citizens taking the law into their own hands, as in the case of vigilante groups and death squads or the proliferation of private security arrangements which may be in themselves discriminatory. Adequate planning must ensure the integration and overlap of different services, the proper allocation of responsibilities and roles, and the observance of basic standards of, and safeguards on, police performance.

165/ See J. Chapman, W. Hirsch and S. Sonenblum, "A police service production function" (University of California at Los Angeles, Institute of Government and Public Affairs, 1973); Poghe, "The effect of police expenditures on crime rates: some evidence", Public Finance Quarterly (Spring 1975); and H. Votey and Llad Phillips, "The control of criminal activity; an economic analysis" in Daniel Glaser, ed., Handbook of Criminology (New York, Rand McNally, 1974).

166/ See George J. Stigler, "The optimum enforcement of laws", in Gary S. Becker and William M. Landes, eds., Essays in the Economics of Crime and Punishment (New York, National Bureau of Economic Research, 1974), pp. 55-67.

165. The courts which are at the heart of the criminal justice process are the most seriously afflicted. In many countries there are long delays pending trial, contributing to severe prison overcrowding. 167/ Court ledgers are packed, and overtaxed judges forced to make hasty decisions on matters affecting the human fate. Irrational disparity in sentencing tends to make equal justice under the law a fiction. Archaic procedures no less than obsolete laws impede streamlined disposal of cases. The bureaucratic technicalities of the judicial process coupled with its delays tend to make its inherent purpose meaningless and to blur the connexion between the original act and its ultimate disposition.

166. Wide-ranging changes are required in many countries to make the courts more effective. This means attention to the weaknesses mentioned above. It also means an innovative mentality that would make justice more real and more appropriate.

Experiments in some countries with comradeship courts may be one direction, the informal juvenile proceeding, another, provided that essential human rights guarantees are maintained. Much, of course, depends on the judges. Democratizing and humanizing the judicial process should help to counteract the myth of judicial infallibility on which the system largely depends. Better selection criteria and improved practice in the judicial profession can draw on the findings of studies which have revealed the extent of sentencing disparities and their relationship to various factors, including the motivation of judges. Like others, the judicial profession is faced with increasing clamour for accountability. Efforts in this direction might include written justifications of sentences passed, provisions for their appellate review, continuing training to acquaint practitioners with new developments in the field and new research findings, the formulation of sentencing guidelines, sentencing "institutes", as well as techniques for increasing self-awareness, such as sensitivity training heretofore reserved for lower-echelon operations. 168/

167. By relieving the criminal courts of minor cases that could better be dealt with otherwise (for example, by civil and administrative measures, mail-order fines, etc.) their attention might be more effectively focused on those acts which deserve their considered attention. Alternatives to confinement pending trial, such as

167/ Economic analysts point out that court delays increase the opportunity costs of a trial compared to a settlement for defendants not released on bail. This leads to a smaller likelihood of going to trial for these defendants than for defendants released on bail. The greater the court delay the greater the difference in trial demand between the two groups. Pre-trial detention also raises the marginal costs of the defendant's resources and hence lowers his input. Therefore defendants not released on bail are likely to have higher conviction probabilities in a trial and receive longer sentences if they settle than defendants released on bail. See William Landes, "An economic analysis of the courts", in Gary Becker and William Landes, *op. cit.*, p. 206.

168/ Williard Gaylin, *Partial Justice: a study of bias in sentencing* (New York, Holt, 1974) and S. C. Versele, "Motivations et rôles dans le monde judiciaire" (Bruxelles, Centre de Sociologie du Droit et de la Justice, Université libre de Bruxelles, 1971).

release on one's own recognizance or in the custody of a responsible person, deserve much wider application. The savings in anguish and material cost of such alternatives warrant their expanded use; they would also contribute to relieving the severe prison overcrowding which is endemic in some regions. 169/ Bail practice, where it prevails, could profit from rationalization; 170/ its use tends to run counter to the equity principle in that the most successful offenders are often best able to post bail. The purchase of freedom (even temporary) is all the more suspect when considering the research evidence linking pre-trial status to subsequent case disposition. 171/ However, where the bail system is used, some thought could be given to ways of making the practice less discriminatory and more productive.

168. Streamlining judicial procedure may involve trade-offs between efficiency and the observance of procedural safeguards which tend to interfere with it. The increased emphasis on defendants' rights has expanded the array of technicalities giving rise to judicial delays. The exact balance is something on which each society and system must ultimately decide, but there is room for the development of some basic organizational forms and process-oriented models which would help to make justice more rational, expeditious 172/ and equitable.

169. If justice is to be made less discriminatory, it must give special protection - or at least an equal chance - to the weak, the young (or old) and the poor. This means more than the provision of symbolic legal aid to the indigent. There are different models for the possible delivery of such services; their

169/ In some areas no less than 80 per cent of arrested persons are still held in prisons immediately preceding sentencing by the court. See A/CONF.56/BP.2, p. 17. See also Informe de la Primera Reunión de Expertos para el Estudio de los Problemas Penitenciarios de América Latina. Campus de la Cedral (San José, Costa Rica, 18-23 de marzo de 1974).

170/ It has been proposed that the interest on money deposited in banks which now accrues to them could be used rather to help indigent defendants. See B. Beiderman in Seminario sobre el Costo del Delito y de su Prevención y Represión (Buenos Aires, 12-14 de agosto de 1971).

171/ An alternative to the present bail system has been suggested whereby the defendant would be compensated for this pre-trial detention rather than have to pay for his release. See William M. Landes, "The bail system: an economic approach", Journal of Legal Studies, vol. II (1) (January 1973), pp. 79-106.

172/ A period not exceeding 30-60 days from arrest to trial has been suggested as a standard. Ways of reducing judicial delay are being explored at the national and international levels: the United Nations Social Defence Research Institute is conducting studies in this area. See also United States of America. Department of Justice, National Institute of Law Enforcement and Criminal Justice, Reducing Court Delay (Washington, D.C., 1973).

effectiveness is not necessarily related to cost. 173/ It is also important that de facto access be assured by informing both defendants and possible plaintiffs of the availability of help and by offsetting handicaps of distance, resiliency, language, cultural background and the like. 174/ Reforms of the juvenile justice system must seek to redress the imbalance between its over-inclusiveness in some cases (exemplified by such status "offences" as "truant" or "minor in need of supervision") and inoperability in others. New and more effective forms of providing services are required here as elsewhere. 175/

170. In some areas the use of the indeterminate sentence, parole and other "rehabilitative" measures seems to be losing favour and it is possible that flat sentences may be reimposed for certain categories of crime. This would come close to the classical school of criminology and to the adoption of the economic model of the rational criminal to whom at least one element of the cost of committing a crime is clearly known. According to that model, criminal sanctions, particularly imprisonment, aim to reduce the returns from criminal activity, thus deterring recidivism and serving as an example to others. By influencing individual preferences and increasing skills, the returns from licit activities are presumably enhanced. However, the dysfunctionality of prison treatment counteracts this claim. Additional punishment merely lowers the opportunity cost of committing future crimes. Systems of work-release and other schemes fostering a more organic and promising job situation offer an incentive and have been effective particularly where an effort is made to ensure integration into the enterprise and identification with a legitimate work life-style.

171. Since research results have not revealed any significant differences among various forms of correctional treatment, considerations of cost and the desirability of minimizing human suffering militate against the use of confinement except as a last resort. But in spite of the calls by leaders in penal reform for a moratorium on new prison construction and for a more humanistic approach, massive new institutions are still being built at enormous expense; and in spite of proclaimed observance of principles such as those embodied in the United

173/ For an analysis of some of the efficiency problems which arise under alternative legal services delivery systems, see L. S. Friedman, "Judicare and the justice market", Working paper 2-28 (New Haven, Connecticut, Yale University, Institute for Social and Policy Studies, 1973), p. 186.

174/ In developing countries additional difficulties may arise from differences between customary and official "modern" justice; the latter may be quite meaningless to large segments of the population.

175/ A project on juvenile justice has been included in the work programme of the United Nations Social Defence Research Institute. There is special scope in multiservice facilities of different kinds. These have been established for juveniles in certain countries (for example, Egypt). See Ahmed Khalifa, "Evaluation programmes for crime prevention and control", (Cairo, National Centre for Social and Criminological Research, 1974), pp. 28-29.

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Nations Standard Minimum Rules for the Treatment of Prisoners, correctional progress is hampered not only by the ambiguity and conflict of goals but also by rigid bureaucratic structure and vested interests which are highly resistant to change.

172. Until scientific evidence of the deterrent effect of prison sentences, particularly severe ones, is obtained, it would presumably be more rational and humane to avoid them wherever possible. Less reliance on institutionalization will mean a change in prison composition. The present mix of predominantly disadvantaged and often petty offenders may well be replaced by a hard-core prison population - necessitating special strategies. Concurrently, with efforts at prison reform, optimal ways of dealing with this group need to be pursued. Correctional planning will have to be predicated on the return of alternative strategies applied to different types of offenders and of the delivery of services of different kinds. 176/

173. Some non-institutional alternatives to incarceration have shown special promise, 177/ but feedback and follow-up are necessary. Careful experimentation is likely to reveal the fallacy of established positions and may point the way to more rational approaches. To be of maximum value to planners, it must take into account not only immediate programme objectives, but also the effects, adjustments and trade-offs from other parts of the criminal justice system. Research derived guidelines for decision making - for example, for parole selection - can help to make the policy more explicit, structuring discretion without removing it and permitting it to be used fairly and rationally. 178/ Operational research can help to assess the efficiency of different organizational forms and procedures - for example, probation case-loads and work-release schemes - and to achieve consolidation of services. It can also help to evaluate

176/ John Holahan, "Measuring benefits from prison reform", (Washington, D.C., Urban Institute, 1973); Deprivation of Liberty in the Context of Crime Control with Particular Reference to New Forms of Delinquency, Report presented to the Fourth Joint Colloquium of the Four Major Organizations Active in the Field of Crime Prevention and the Treatment of Offenders, Bellagio, Italy, 22-25 April 1975; Robert G. Hann and Richard F. Sullivan, "Economic analysis of the Solicitor General: a framework for evaluating specific correctional services with specific reference to psychiatric services in special treatment centres" (Ottawa, Toronto, 1972); and "A cost-benefit approach to evaluating community residential centres" (Ottawa, Department of the Solicitor General, 1972).

177/ A community treatment project in Des Moines, Iowa demonstrated the feasibility of releasing high-risk offenders not normally considered suitable for release. See United States of America, Department of Justice, National Institute of Law Enforcement and Criminal Justice, A Handbook on Community Corrections in Des Moines (Washington, D.C., 1975), p. 42.

178/ Don Gottfredson, P. B. Hoffman, M. H. Sigler and L. T. Wilkins, "Making parole policy explicit", Crime and Delinquency (January 1975), pp. 35-44.

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the efficacy of different alternatives in the diversion of cases from the criminal justice system, 179/ which must also safeguard fundamental rights. Some of these, such as the use of fines, have been advocated on the basis of economic analysis, 180/ but criticized as inequitable and morally untenable if they lead to the "buying" of crimes. 181/ But, like other types of sanctions, fines (especially graduated fines) may be particularly suitable for certain categories of crime.

174. Socially useful approaches such as community service in lieu of a prison sentence or restitution would maximize welfare gains and help to reduce the social cost of crime. Exploratory studies could also modify the mental set now geared toward punishment; behavioural investigations have long emphasized the efficacy of rewards as against punishment as a stimulus to learning, and this knowledge should be used inventively and verified in criminal justice settings. Preventive strategies aimed at conflict resolution and the reduction of social tensions could equally benefit from innovative social science research. 182/

179/ Supported work programmes have shown high taxpayer benefit/cost ratios, illustrating not only the efficient use of scarce resources but also the kind of programme which can be operated to the economic advantage of both taxpayers and supported employees. See "Cost-benefit analysis; three applications to corrections ... probation subsidy, diversion, employment" (Washington, D.C., Correctional Economics Center of the American Bar Association); and Raymond T. Nimmer, Diversion (Chicago, Illinois, American Bar Foundation, 1974), p. 119.

180/ Gary S. Becker, "Crime and punishment: an economic approach", Journal of Political Economy, vol. 76, No. 2 (March-April 1968). This article, which initiated the recent wave of economic literature on crime and its control, concluded that at the optimum the responsiveness of the level of offences to the probability of conviction was greater than to the severity of punishment; that fines were in general preferable to other forms of punishment, and that appropriate level of fines was given by the harm inflicted by the offender. This conclusion has been challenged by others: see R. A. Carr-Hill and M. H. Stern, "Theory and estimation in models of crime and its social control and their relations to concepts of social control" (University of Sussex and Oxford University, 1974).

181/ Leszek Lernell, Rozważania o przestępstwie i karze na tle zagadnień współczesności (Reflections on Crime and Punishment in The Light of Contemporary Issues) (Warsaw, Państwowe Wydawnictwo Naukowe, 1975), pp. 224-231.

182/ In some countries - for example, the Union of Soviet Socialist Republics - ways of optimizing the social climate and psycho-social dynamics in work collectives have been explored with a view to including this factor in efforts to make planning for work collectives maximally effective. See V. V. Orekhov, Sotsialnoe planirovaniye; i voprosy borby s prestupostiu (Social planning and the fight against crime) (Leningrad, Izdatelstvo Leningradskovo Universiteta, 1972), pp. 94-96.

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175. A truly interdisciplinary approach calls for the integration of knowledge in practice as well as theory. In this respect, the field of crime prevention and control still has a long way to go. The recent initiatives of economists show the importance of added dimensions to the work. Unfortunately, the alliance is sometimes only nominal and sharp cleavages of discipline and orientation persist, detracting from the potential contributions. A more organic relationship, involving also those with other orientations, is clearly needed to foster new and more productive modes of thinking and acting. So is a broader vision looking beyond the immediate time horizon and in different directions (including backwards). Some economists, contrary to their training, have ignored in their studies the long-term social costs of policies or laws. Similarly, criminologists and criminal justice decision makers have been remiss in applying knowledge from economics and management science which would permit them to optimize their interventions and to maximize the returns from the investments made.

176. A beginning could be made in relation to those aspects of criminal justice where there has been a demonstrated interest from two or more sides and where controversy persists. This includes such areas as deterrence; 183/ the validity of the calculus of crime; 184/ the economics of the illicit marketplace; 185/ the environment in which crime takes place; recidivism; enforcement of laws against victimless crimes; 186/ consumer vs. producer risk in crime; 187/ the decision processes of criminal justice personnel and the choice of policy options under different constraints. The fusion of research interests and collaborative methods of analysis should permit added benefits.

177. The major weakness in the handling of crime to date has been the failure of decision makers to act within a framework which would advance paramount social goals. Combined with a systems approach which takes into account crucial interdependencies and clearly identifies already well known pressure points, the

183/ See, for example, Llad Phillips, "Crime control: the case for deterrence" and Charles R. Tittle, "Punishment and deterrence of deviance", in S. Rottenberg, ed., The Economics of Crime and Punishment (Washington, D.C., 1973).

184/ See, for example, Isaac Ehrlich, "Participation in illegitimate activities", Journal of Political Economy, 1972.

185/ See Leslie T. Wilkins, "Current aspects of penology: directions for corrections", Proceedings of the American Philosophical Society, vol. 118 (June 1974), pp. 235-247.

186/ Lester Thurow and Carl Rappoport, "Law enforcement and cost/benefit analysis", Public Finance, August 1974.

187/ Hans-Rudolf Schulz, "Sicherheit als Bestandteil der Wohlfahrt; eine oekonomische Betrachtung über gesellschaftliche Kosten der Kriminalität", Schweizerische Zeitschrift für Volkswirtschaft und Statistik, No. 9 (1972), pp. 377-403.

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principle of social cost reduction permits determination of an appropriate balance of policies related to crime. According to the economists, the notion of inputs and outputs of activities in a production process, and the statistical evaluation of these input-outputs of relationships, will ultimately permit the minimization of the social cost of crime. ^{188/} The latter is viewed as the interaction of the forces of the crime-generating process and the criminal justice system operating as a service industry with certain inputs and outputs at each level of operation. To achieve the goal of minimizing the social cost of crime, subject to the technical constraints faced by the components of the criminal justice system and the behavioural relationships which prevail over the members of society taken in the aggregate, certain measures may be adopted with certain explicit and implicit costs. But there is in each society some implicit price beyond which it will not go, or should not go, to further reduce crime, whenever the point of marginal utility has been reached. Examining the system at a given level of operations and for a given set of socio-economic conditions, one can view the trade-off between different policy options - for example, probation vs. detention; stricter police surveillance vs. infringement of freedom and so forth.

178. If the policies generated by it are to be more consistent, as well as rational and equitable, the criminal justice system will have to translate its designation into action. In most countries the different subsystems are operating relatively independently and often at cross-purposes. More coherent and clearly articulated goals would in themselves help to achieve a more unified approach. Successful planning, rather than providing more of the same (more police, more prisons, more probation officers etc.) should focus on the consolidation of available elements and the establishment of more integral criminal justice operations. The development of models for this purpose is useful for allocating costs by subsystem or type of crime; for projecting future resource requirements based on future crimes or arrests, or for changing the system parameters to see the impact of flows, costs and resource requirements elsewhere in the system. All these considerations are important in the planning process. Measures of effectiveness in such systems are complex vectors rather than simple scalars and require multidimensional criteria. This is true of most problems in the public sector where government tries to perform social good at some cost. In addition, there are usually several components reflecting governmental costs and costs to various sectors of society which are not easily compared or related to effectiveness measures.

179. There are problems arising with the systems approach to criminal justice stemming from the danger of adopting too mechanistic an approach; the widespread uncertainty about cause and effect relationships, the changing behaviour of participants in response to changes in public policy, changes in public values, change in what is considered good professional practice, adaptation of differing capacity constraints or simply new fads. With these limitations in mind, there have been promising attempts to develop flexible models of basic criminal justice

^{188/} See, for example, Robert G. Hann, *op. cit.*

systems which permit the assessment of the consequences of various system changes. 189/

180. This approach to planning and management overcomes the limitation of more fragmented approaches which focus on the achievement of their own limited goals without consideration to its contribution to the over-all purposes of the system. The result is "that criminals receive unequal treatment; citizens receive unequal protection; resources are not spent to minimize social costs of crime. Obviously for an effective reorganization of the criminal justice system we must take the conception of an integrated system seriously if either equity or efficiency are to be served." 190/ As a corollary, it has been suggested that rather than operating in terms of "goal-oriented guessing" (as opposed to quantified goals), there should be adherence to the principle of social cost minimization in all stages of the operation of the criminal justice system and that standards for judges, correctional officers, probation officers and the like etc. should be established and maintained to minimize capricious punishment and help to achieve optimal functioning of the system. Envisioning the interlocking processes of crime generation and control as a feedback process not only helps to pinpoint alternatives for control but also illustrates the interdependence of the various measures.

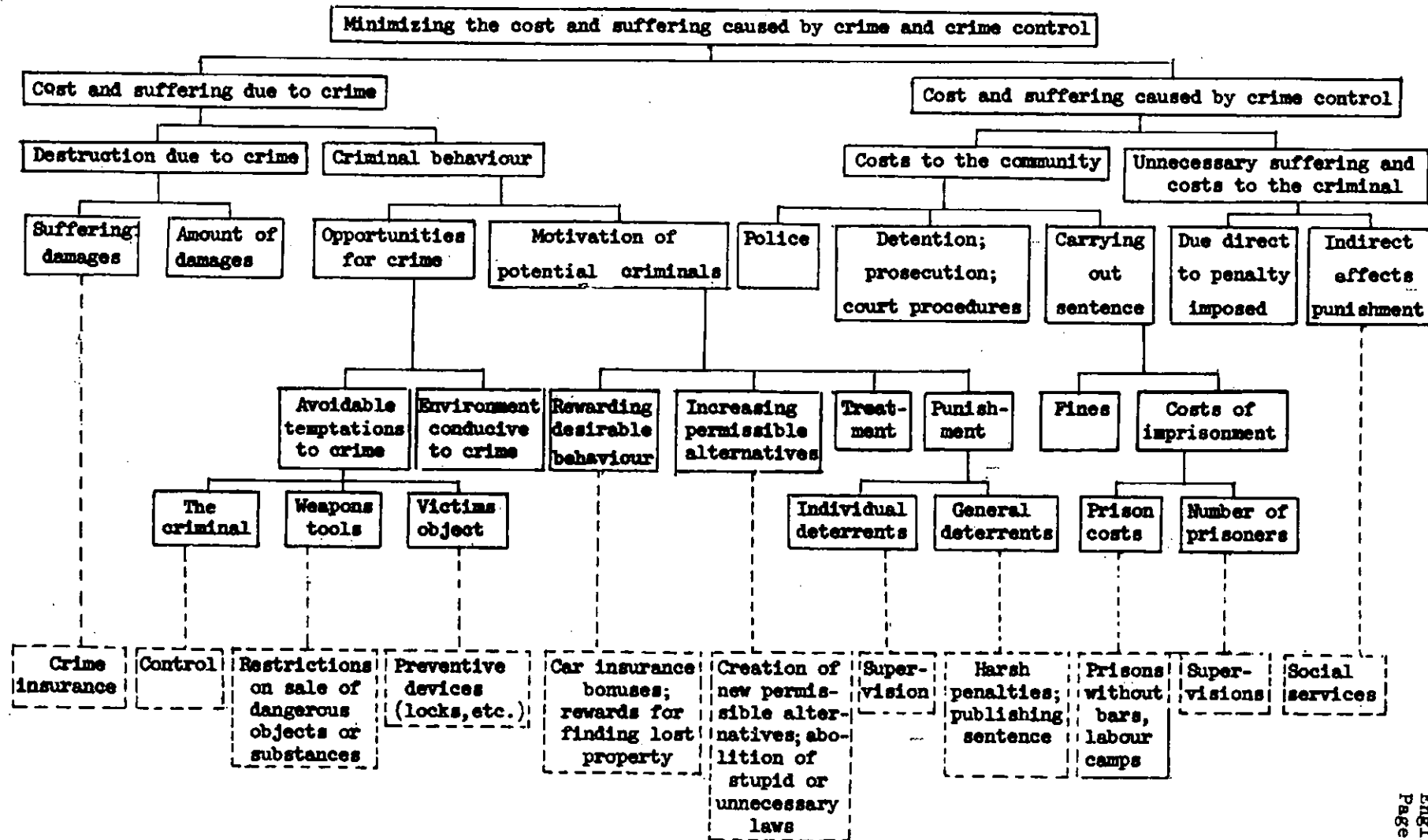
181. These cover a considerable range, with some more suited than others to the over-all goal of minimizing the social cost of crime. A comprehensive scheme detailing the possible directions, has been developed by a Finnish researcher (see table 4). The planning strategies would consider the available options for

189/ One such model permits the person using it to create a test case and highly flexible design tool allowing a rapid assessment of the effects of the choices made (both linear and multiyear feedback models can be used). Alfred Blumstein. "Management science to aid the manager; an example from the criminal justice system." Sloan Management Review, Fall 1973, vol. 15, No. 1, pp. 47-50, and "Application of the Jussim model to a juvenile justice system". Computer Applications in the Juvenile Justice System. National Council of Juvenile Court Judges, December 1974, p. 84; Alfred Blumstein and R. C. Larson, "Models of a total criminal justice system". Operations Research, vol. 17 (March-April 1969), pp. 199-232 and G. Cassidy, A. Blumstein and G. Hopkinson. Systems Analysis and the Criminal Justice System. Ottawa, Department of the Solicitor General, 1973. See also R. Hann et al. Decision-making in the Canadian criminal court system. A systems analysis, Toronto, Centre of Criminology, University of Toronto, 1973, and /U.S./ National Advisory Commission on Criminal Justice Standards. Criminal Justice System. (Washington, D.C., 1973), p. 286, and Leslie T. Wilkins, "Quantitative methods in social defence planning, with special reference to cost-benefit and systems analysis", in A Policy Approach to Planning in Social Defence (United Nations publication Sales No. 72.IV.9), pp. 140-164.

190/ Harold L. Votey and Llad Phillips, "Social goals and appropriate policy for corrections: an economic appraisal", Journal of Criminal Justice, vol. I (1973), p. 233.

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Table 4

HIERARCHY OF GOALS AND MEANS FOR THE MINIMIZATION OF CRIME AND ITS EFFECTS^{a/}

----- Examples of means of minimizing undesirable effects.

a/ Chart prepared by Hanmu Takala. From Report of United Nations Seminar on the Experience of the Nordic Countries in Social Planning, Rungstedgaard, Denmark, 19-28 November 1972, p. 53.

implementation in terms of short-term, medium-term and long-term feasibility. In the Soviet Union the Central Institute for Scientific Research in the Judicial Field has developed an empirically tested mathematical model which not only permits forecasting of changing trends of crime but also the formulation of optimal variant of policy measures designed to strengthen observance of the law during the forthcoming planning period. 191/

182. A striking weakness of criminal justice systems in the past has been the lack of accountability - both social and material. This needs to be rectified, both in the interest of more effective justice and more efficient systems management. To avoid possible abuses, the auditing function might be vested in the hands of a quasi-judicial group whose members would serve as sort of ombudsman to ensure socially adequate criminal justice, while financial accountability could be ensured through more impersonal means. The use of judicial panels, lay assessor and grievance redress procedures may help to ensure public accountability and provide fairer justice. 192/

183. There will be a need for training future generations of criminal justice planners and for training manpower now working in the field. 193/ The required expertise will, again, need to come from many quarters, including also national development planners and planners concerned with other systems with which the criminal justice system interacts. The mix of a broad range of viewpoints, backgrounds and approaches, combined with specialized expertise, should enhance the likelihood of fruitful results. This also requires the forecasting of manpower needs required for the system in the short-term and multiterm to carry out selected policies and priority programmes likely to achieve maximum impact. The optimal use of human resources (whether operators of the system or those processed by it) will determine the feasibility and fruitfulness of system changes designed to achieve minimization of the social cost of crime.

191/ Orekhov, op. cit., p. 47.

192/ See, for example, "Oekonomische Aspekte der Strafrechtspolitik", Research project of the Ludwig-Boltzmann Institut für Kriminalsoziologie (Vienna, 1975); and Burt Nanus, "A general model of criminal justice planning", Journal of Criminal Justice, vol. 2 (1974), pp. 345-356.

193/ G. O. W. Mueller and Freda Adler, "Manpower mobilization for criminal justice", Denver Law Journal, vol. 50, No. 4, pp. 479-504. Within the planning perspective, new organizational forms and more efficient ways of utilizing manpower in the criminal justice system need to be developed with special scope for paraprofessionals and multipurpose workers. See also F. Ferracuti and M.C. Giannini. Manpower and Training in the Field of Social Defence. Rome, United Nations Social Defence Research Institute, 1970.

D. Redistributing the costs of crime

184. In addition to minimizing the social cost of crime, planning for crime prevention must also seek to redistribute this cost more equitably. This notion, like that of minimizing the consequences of crime rather than its sheer volume, focuses on the harmful consequences of acts rather than solely on their legal definition. In that sense, it seeks to redistribute the social cost arising from crime and policies of crime control through appropriate planning which would take due account of this cost and of the tendency of certain policies to compound and/or concentrate them on certain groups, particularly where this is antithetical to the welfare principle of ensuring the optimum quality of life for the most people. 194/

185. This effort must take careful account of the structural factors in different societies, their value systems, attitudinal sets and receptivity to change, as well as the readiness of policy makers and planners dealing with criminal justice and with planning issues at the broader national level to open up and adopt new ways of thinking which will permit reoriented approaches and tangible reform. It will also require that account be taken of the relationship of society, victims and offenders in criminal policy making, and of how the cost of crime and crime control could be distributed with greater justice among all the sides of this relationship and among the individuals on each side. Not only society, as such, or the victims or offenders but also the potential or "latent" victims and criminals are interested parties to this relationship through their proneness to risk. Of course, not all crimes have identifiable victims or plaintiffs, as distinguished from society as a whole. However, it might be possible to produce a kind of warning system which would alert citizens and induce them to assume certain avoidance costs to prevent excessive criminal harm from being inflicted. It may also be advantageous for a society to pay the price for an additional increment of crime in order to obtain greater diffusion of loss from crime. Conversely, the costs of crime can be shifted (between different categories of crime, areas, etc.) and in this process the total cost of crime reduced. Decreased aggregate social crime costs may involve negative transfer payments among different segments of citizens. 195/

186. If the objective of criminal policy is defined simply as the reduction of the cost of crime, it may be deemed purely utilitarian and the means used would be designed to achieve this end. However, when the aim of ensuring the most equitable distribution of this cost is included in policy making and planning, cost becomes a justice-oriented factor. Increasingly, throughout the world

194/ This orientation has been fostered in some Scandinavian countries, particularly in Finland where it is coming to be reflected in official policy. See Raimo Lahti, "On the reduction and redistribution of the costs of crime: observations on the objectives and means of criminal policy", Jurisprudentia, No. 1 (1972), pp. 298-313.

195/ Simon Rottenberg, "The social cost of crime and crime prevention" in B. N. McLennan, Crime in Urban Society. New York, Donnellen, 1970.

considerations of equity are being stressed in making policy choices and are being incorporated in planning schemes although they may not ostensibly be justifiable on utilitarian grounds. In fact, there may sometimes be an inherent, though perhaps illusory conflict between equity and efficiency, but considerations of justice are rated high as normative arguments encompassing the principles of equality and predictability.

187. As implied in the concept of equity, equality in this sense must be understood as relative rather than arithmetical. It has been pointed out, accordingly, that it is not in conformity with justice to distribute the cost of crime uniformly in an arithmetical manner among all the citizens without any regard to their resources or to other factors which may affect their capability to pay the costs (or endure the suffering inflicted). As one advocate of this approach has phrased it, "observing the principle of merit often means paying attention expressly to considerations of equity". 196/

188. In this perspective, it would be a corollary that in dividing the cost among the different sides involved, society, disposing as it does of the largest resources, must carry the largest share. That society must bear the main burden is further evident from the fact that only through the measures it adopts can crime and its harmful effects be properly regulated and perhaps reduced. Similarly, the interests of society (that is of the public at large) are most effectively protected by reducing the cost of crime. By so doing, the goal of reducing criminality will also ultimately be served.

189. As in the case of measures to minimize the cost of crime, strategies to redistribute cost more justly will differ among countries with the basic orientations of their systems and in accordance with whatever restrictions there may be on the means that are available and that derive, in part, from these orientations.

190. The principle of a just redistribution of the cost of crime will be advanced by preventive planning which fulfils the twin requirements of being more effective in the long run than remedial measures would be and, in terms of cost, of falling more or less equitably on the various members of the citizenry. It will also be served by measures designed to reduce social inequality, because not only are the costs of crime shared more effectively but a just redistribution of costs and social justice is also advanced. The aim of attaining "social criminal justice" might thus be more nearly realized. The costs of reducing social inequality, of preventing opportunities for the commission of crimes, of preventive measures directed towards strengthening informal social controls and promoting effective socialization will be distributed among potential victims and of potential offenders, as well as throughout society at large.

191. In addition to such preventive strategies, and where they have not accomplished their aim, redress of loss suffered by victims deserves priority. The provision of adequate compensatory damages for victims of crimes, particularly

196/ Ibid.

of violent crimes, merits urgent action. This means more than merely token restitution. The lack of suitable provisions in this regard, the ignorance of rights and the difficulties involved, even where promises for victim compensation exist, have been mentioned before. This needs to be corrected. While suffering and loss cannot be compensated only in material terms, such action is a requisite element of more profound manifestations of concern with the victim's plight which have been manifest only rarely in the past. In some countries, recognition of the importance of providing adequate and speedy compensation to victims of crimes has been reflected in the appointment of official bodies to study the question and the ways of dealing with it. Indigenous practices under systems of customary justice in Africa and Asia, which stress restitution to victims, offer a lesson in this respect.

192. While ostensibly the offenders pay a lesser cost in the long run, these may be as great or greater still. Ways of ensuring proper legal protection and of applying sanctions that would minimize suffering, while at the same time reducing the chances of reverting to crime and of increasing prospects of resocialization might usefully be devised, since these objectives are not necessarily mutually exclusive. Most of them are in the interest of both society and the offender, and even the reduction of suffering to him may be seen as having eventual societal pay-off which current methods, such as harsh and often selective confinement that are likely to arouse resentment and reinforce rebellion against the dominant social norms, are unlikely to achieve. There is a range of approaches and measures that can be utilized to redistribute the social costs deriving from crime and which also help to minimize them. Closer analysis reveals the tenuousness of fragmentation in all respects, including the semantic divisions between "society", "perpetrator" and "victim". Each in a sense is all three, and the costs, like the responsibility, must be shared, though the proportions may vary. Vulnerability, like responsibility, cannot easily be determined or quantified through cost/benefit analysis, but their recognition may well be the first step to a more just and ultimately more effective posture.

CONCLUSION: A CHALLENGE FOR THE FUTURE

193. This paper has sought in a preliminary way to trace some of the directions which future research and planning related to crime might take in order to reduce its negative consequences and permit those which are unavoidable to be more easily and fairly absorbed. The history of man and the heritage of science are rich with fortuitous findings which have permitted the charting of new courses. One of the inherent limitations of forecasting is that it provides images of the future based on current knowledge, while the possibilities for change and innovation are infinite. Thus, too, some of the most significant approaches to crime problems yet to be devised may well lie outside the scope of this exercise. They might open up new avenues and horizons of environmental management (including the social environment) which would ensure national growth untrammelled by the more insidious consequences of crime, and individual fulfilment free of its victimization and insecurity.

194. International co-operation and the cross-fertilization of experience and expertise which it brings should help substantially in this process. The developing countries have a special opportunity in this respect, relatively unshackled as they are by policies and practice which have proved largely bankrupt. 197/ If, rather than drawing on alien methods and prototypes, they permit vital new initiatives to emerge, rooted in their socially and justice-oriented traditions, their prospects will be vastly enhanced. But critical analysis and scientific assessment of alternative courses of action in relation to the problems at hand 198/ and to the means that are available are a springboard from which more effective solutions may be devised for countries at all points of the developmental continuum.

195. By sifting out some of the consequences of crime for discussion and by dealing with certain aspects of the minimization and redistribution of the cost of crime, the larger reality of their interrelationships may have been disturbed. This reality is infinitely complex and ever-changing. It is the configuration of the factors and processes involved which determine its nature, and any attempt to deal with it must take due account of this fact. Thus, while a number of possible avenues for investigation and action have been mapped, there is no assurance that any one of them will bear fruit if other factors are neglected or indeed ignored.

196. The most crucial factors are perhaps the most difficult to quantify and to

197/ One of the advantages the developing countries have is that they can experiment with and evaluate crime prevention and control techniques to a degree impossible in complex systems with rigid and sometimes fossilized professional and administrative divisions. See William Clifford, "Planning for future crime in Africa", in An Introduction to African Criminology (Nairobi, Oxford University Press, 1974), p. 217.

198/ See report of the Seminar on the Assessment of Social Defence Problems and Courses of Action, held at the Centre for Social and Criminological Problems in Cairo, December 1973.

control. These include adequate motivation and the optimization of social dynamics. Without these, the most rigorous cost/benefit analysis, ambitious planning or viable management scheme is an empty exercise. How to elicit the kind of motivation and foster a climate that promotes socially productive rather than destructive activity is one of the pivotal questions which social scientists, educators, national leaders and ultimately society itself must resolve. The prophets of doom for the planet have drawn attention to the natural limits on its growth. They may have underestimated man's stake in the future. They may also have underestimated the real danger which lies in social and institutional breakdown and the capacity to avert and overcome it by adopting a viable strategy.

**Crime Prevention
and
Criminal Justice Branch-Reference Unit**

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