

THE WORLD BANK GROUP ARCHIVES

PUBLIC DISCLOSURE AUTHORIZED

Folder Title: Baum, Warren C. - Articles and Speeches (1970 - 1978)
Folder ID: 1651305
Fonds: Records of Office of External Affairs (WB IBRD/IDA EXT)

Digitized: November 12, 2013

To cite materials from this archival folder, please follow the following format:
[Descriptive name of item], [Folder Title], Folder ID [Folder ID], World Bank Group Archives, Washington, D.C., United States.

The records in this folder were created or received by The World Bank in the course of its business.

The records that were created by the staff of The World Bank are subject to the Bank's copyright.

Please refer to <http://www.worldbank.org/terms-of-use-earchives> for full copyright terms of use and disclaimers.



THE WORLD BANK
Washington, D.C.

© 2012 International Bank for Reconstruction and Development / International Development Association or
The World Bank
1818 H Street NW
Washington DC 20433
Telephone: 202-473-1000
Internet: www.worldbank.org

PUBLIC DISCLOSURE AUTHORIZED

BAUM, WARREN C. - ARTICLES and speeches (1970-1978)

DECLASSIFIED
WBG Archives

The World Bank Group
Archives
1v



1651305
A1992-007 Other #: 3 Box # 212048B



June 1970

"The Project Cycle by Warren C. BAUM reprinted from Finance &
Development - **filed in art. drawer**



W. BAUM

Project cycle. (French) -



Baum, Warren C. "Le cycle des projets." extrait de Finances et Développement No 2, 1970

Dans cet article, l'un des plus importants jamais publiés dans «Finances et Développement», le Sous-Directeur — Projets et Réalisations, de la Banque Mondiale, expose en termes clairs et simples la façon dont la Banque s'acquitte d'une de ses principales fonctions, à savoir rechercher, préparer, évaluer et contrôler l'exécution des projets de développement économique.

Warren C. Baum

S'IL FALLAIT répondre en quelques mots à la question : «Que fait la Banque Mondiale ?» on pourrait dire : «Elle prête de l'argent pour des projets de développement.» En effet, la tâche principale de la Banque consiste à financer des projets spécifiques, après les avoir minutieusement sélectionnés, préparés et évalués, et à en contrôler l'exécution. La Banque et sa filiale, l'Association Internationale de Développement (IDA), qui accorde depuis 1961 des prêts à des conditions de faveur, ont depuis leur création accordé près de 950 prêts et crédits¹ d'un montant total d'environ 17 milliards de dollars E.U., destinés en majorité à des projets spécifiques tels que construction d'écoles, de barrages pour l'irrigation, de centrales électriques et de routes. Au cours de l'exercice 1969, par exemple, 111 prêts et crédits (chiffre record) ont été signés, et tous sauf un étaient destinés à des projets individuels. L'importance ainsi attachée aux prêts accordés pour l'exécution de projets découle des Statuts de la Banque qui stipulent que, sauf dans des cas spéciaux, cette institution ne consentira des prêts que pour des projets spécifiques de reconstruction ou de développement.

L'octroi de prêts-projets a pour objet de garantir que les fonds de la Banque sont investis dans des projets économiquement viables et productifs afin qu'ils puissent contribuer à la fois à la capacité de remboursement du pays emprunteur et au développement de son économie. C'est grâce à la coïncidence de ces deux objectifs que les fonctions de la Banque, en tant qu'institution financière internationale, se confondent avec celles qu'elle remplit de plus en plus en tant qu'institution de développement.

¹ Les prêts accordés par la Banque sont assortis d'un taux d'intérêt qui est actuellement de 7 pour cent; l'IDA accorde des crédits à des conditions de faveur, à savoir 50 ans d'échéance, avec une commission de service de 0,75 pour cent. Les méthodes de préparation des projets sont identiques pour les deux institutions et, dans cet article, toute référence à la Banque et aux prêts s'applique également à l'IDA et aux crédits.

Même avec le montant record de prêts récemment accordés et les montants encore plus élevés envisagés pour l'avenir, la Banque et l'IDA ne s'occupent, et ne continueront à s'occuper, que d'un nombre relativement peu élevé d'opérations concernant des projets. Ceux-ci sont en général importants et leur coût est normalement de l'ordre de plusieurs millions de dollars. Extrêmement variés, ils peuvent concerner aussi bien des plantations de palmiers à huile en Papouasie/Nouvelle-Guinée que la construction d'une voie de chemin de fer à grande vitesse au Japon. Il n'y a pas deux projets semblables; ils ont chacun leur propre histoire, et dans chaque cas le prêt doit être étudié spécialement pour chacun d'eux. La Banque et l'IDA réexaminent et révisent constamment les techniques et les modalités des prêts-projets afin de les perfectionner au maximum.

Telle qu'elle est exécutée à la Banque cette tâche donne lieu à un cycle continu et auto-soutenu d'activités où l'on peut distinguer quatre phases principales : la première est la recherche et la définition du projet; la seconde est sa préparation; la troisième est son évaluation, puis quand celle-ci est affirmative, la négociation et la signature d'un prêt pour sa réalisation; la quatrième est le contrôle de son exécution et de sa mise en marche afin de s'assurer que les objectifs visés ont bien été atteints.

Ce processus est considéré comme un cycle parce que chaque phase est non seulement la conséquence logique de la précédente mais conduit aux suivantes, et nous essayons de faire en sorte que ce cycle se renouvelle de lui-même afin que de nouveaux projets viennent remplacer les anciens dans un processus continu.

Recherche et Définition

Voyons d'abord ce qu'on entend par recherche et définition : il s'agit du processus qui consiste à trouver des projets qui sont hautement prioritaires, qui présentent les conditions requises pour être financés par la

Banque, et que l'emprunteur, la Banque et le gouvernement souhaitent voir considérer. La définition d'un projet exige essentiellement la vérification des trois conditions suivantes : il faut d'abord que le secteur de l'économie auquel le projet se rapporte, et le projet lui-même, soient considérés comme étant d'une haute priorité pour le développement et reconnus comme tels dans les plans de développement du gouvernement. Il faut ensuite déterminer si, à première vue, le projet semble viable, c'est-à-dire s'il est possible de trouver une solution technique au problème auquel le projet se rapporte, à un coût en rapport avec les avantages à en retirer. Il faut enfin s'assurer que le gouvernement soit prêt à lui accorder son appui, notamment sur le plan financier, et ceci parce que les prêts sont accordés soit aux gouvernements ou organismes gouvernementaux, soit à des institutions privées avec l'appui et la garantie de l'Etat.

Comment procède-t-on pour repérer les projets ? La réponse à cette question est loin d'être simple. De même qu'il existe une grande diversité de projets pour lesquels nous prêtons des fonds, nombreuses sont également les manières par lesquelles des projets peuvent être portés à l'attention de la Banque, puis définis et préparés.

La façon la plus simple de trouver un nouveau projet à financer consiste à accorder au même emprunteur un autre prêt (dit prêt «relais») pour des stades ultérieurs de développement du même projet ou d'un projet semblable. La Banque a maintenant vingt ans d'existence et, comme on peut s'en douter, nous répétons souvent des opérations avec les mêmes emprunteurs. Ceci est particulièrement vrai de certains secteurs comme l'énergie et les transports pour lesquels nous accordons des prêts depuis de longues années. A titre d'exemple, signalons que nous avons accordé dix prêts et crédits aux Chemins de fer indiens pour financer des segments successifs annuels ou bisannuels de leur programme d'investissement. Nous avons accordé sept prêts à la Comisión Federal de Electricidad pour la réalisation de diverses phases du programme d'expansion du réseau énergétique mexicain. On voit ainsi que l'une des sources principales de nouveaux projets réside dans nos relations suivies avec nos emprunteurs, ceux-ci étant portés à notre attention lors du contrôle des projets en cours.

Je ne voudrais pas donner l'impression que parce qu'ils sont faciles à trouver, ces prêts relais sont forcément faciles à préparer et à négocier. Ceci est parfois vrai, et si le premier projet marche bien, le second pourra ne pas présenter de complications. Mais il n'en est pas toujours ainsi. Pour le premier prêt, la Banque doit en quelque sorte faire confiance à l'emprunteur qu'elle connaît superficiellement et qui peut en fait être une nouvelle institution établie pour les besoins de la cause, ou bien une institution que nous commençons à peine à connaître. On se met d'accord sur divers objectifs et l'on prend des engagements, mais il peut arriver que le projet ne tourne pas comme on l'avait prévu ou

espéré. Dans ce cas, trois, quatre ou même cinq années pourront s'écouler avant que l'on puisse accorder le second prêt, car il faut résoudre les problèmes surgis à l'occasion du premier et s'assurer qu'il donne des résultats satisfaisants avant de pouvoir en accorder un second. On voit ainsi que si certains prêts relais sont très simples, d'autres, au contraire, présentent de grosses difficultés.

Opérations "piggyback"

Il existe une variante du prêt relais qui est connue en anglais sous le nom peu élégant, mais descriptif, d'opération «piggyback», expression empruntée à la terminologie des transports ferroviaires. La meilleure façon pour la Banque de s'assurer un cycle automatiquement renouvelable de projets est d'inclure dans un prêt destiné à un projet donné des fonds qui seront utilisés pour effectuer des études de pré-investissement pour des projets ultérieurs. Si, par exemple, la Banque finance la construction d'un barrage qui représente le premier stade du programme d'expansion d'un réseau énergétique, le prêt pourra fort bien inclure les études nécessaires à la définition et à la préparation des stades suivants.

Missions

Il y a d'autres façons de trouver des projets. La Banque envoie parfois dans un pays une mission spéciale chargée d'étudier les secteurs dans lesquels nous n'avons pas encore accordé de prêts. On envoie sur place une équipe de spécialistes pour effectuer une reconnaissance préliminaire du secteur et se rendre compte s'il est possible de trouver des projets intéressants. Dans le domaine de l'agriculture comme dans celui de l'éducation, nous avons établi des relations officielles avec d'autres institutions spécialisées des Nations Unies qui se chargent de rechercher et de préparer des projets. En ce qui concerne l'agriculture, la Banque a conclu avec l'Organisation des Nations Unies pour l'Alimentation et l'Agriculture (FAO) un accord aux termes duquel cette dernière fournit le personnel envoyé en mission pour rechercher des projets pour la Banque et aide également à les préparer une fois qu'ils ont été repérés. Il y a, à la FAO, un service spécial qui travaille à plein temps à rechercher et à préparer des projets pour la Banque, dont le coût est réparti à égalité entre les deux institutions. L'Organisation des Nations Unies pour l'Education, la Science et la Culture rend à la Banque les mêmes services dans le domaine de l'éducation.

Pour se rendre compte de l'importance que la Banque attache à la recherche et à la définition des projets, il suffit de tourner le regard vers l'Afrique, qui est pour la Banque la zone d'activité la plus récente en termes de prêts. Elle a établi en Afrique orientale et en Afrique occidentale des missions dont les sièges sont respectivement à Nairobi et à Abidjan, et qui prospectent toute

l'Afrique au sud du Sahara. Ces missions sont chargées d'aider à trouver et à préparer des projets pour l'exécution desquels la Banque et l'IDA accorderont des prêts. Elles ont réussi à alimenter ces institutions avec un nombre important de projets qui ont été préparés et qui atteignent maintenant le stade de la négociation.

Les missions économiques contribuent de façon importante à la recherche des projets. La Banque envoie périodiquement de telles missions dans ses pays membres en voie de développement pour toute une variété de raisons et notamment pour examiner les principaux secteurs de l'économie en vue d'établir des priorités et de repérer les projets susceptibles de présenter les conditions requises pour bénéficier d'un prêt.

Autres Moyens

Il y a enfin des projets qui sont identifiés sans notre concours. Ceux-ci sont généralement portés à notre attention par de nouveaux emprunteurs désireux de bénéficier de l'assistance de la Banque, ou par des organismes privés. Supposons, par exemple, qu'une entreprise internationale fabriquant de l'acier ou de l'aluminium envisage d'effectuer un investissement pour exploiter des ressources minérales en Afrique; elle pourra faire appel au concours de la Banque pour obtenir à la fois le capital supplémentaire et les garanties que fournit sa présence et prendra, dans ce cas, l'initiative de porter de tels projets à notre attention.

Cependant, c'est généralement à la Banque qu'incombe le soin de trouver des projets. Etant donné les objectifs plus élevés qui ont été énoncés par M. McNamara, la recherche revêt maintenant une importance croissante, puisque c'est elle qui permet d'alimenter la Banque en projets pour lesquels elle pourra accorder des prêts au cours des années à venir.

PREPARATION

Une fois qu'un projet a été repéré, il entre dans ce que l'on appelle le « pipe-line » des projets; alors commence une longue période d'étroite collaboration entre la Banque et l'emprunteur éventuel. C'est cette phase qui est la plus difficile à caractériser, car elle varie considérablement avec la nature du projet, l'expérience de l'emprunteur, les relations de la Banque avec l'Etat membre et l'emprunteur, etc. J'ai déjà souligné la diversité des projets et le fait que chacun d'eux a son histoire propre.

La « préparation » comprend toutes les étapes nécessaires pour amener un projet au stade où il a été reconnu réalisable du point de vue technique, économique et financier, et où il devient possible de l'évaluer. Pour un prêt relais, la durée de la préparation peut ne pas dépasser quelques mois lorsque l'exécution du premier projet n'a soulevé aucun problème. En revanche, si la Banque éprouve des difficultés à définir et à préparer

avec l'emprunteur un projet satisfaisant, ou s'il ne lui est pas possible d'accorder un prêt pour d'autres raisons (par exemple tant que le pays n'a pas amélioré la gestion de son économie), la préparation peut durer cinq années ou même davantage. Il arrive que certains projets soient abandonnés au cours de cette période, et aucun prêt ou crédit n'est alors accordé.

Le temps que prend cette préparation est généralement une source de mécontentement pour les gouvernements des pays en voie de développement, dont on comprend le désir d'écourter la période de préparation du projet et de passer directement du stade de la définition à celui de l'octroi du prêt. Mais l'une des caractéristiques des projets est qu'ils représentent des investissements à long terme, et le temps passé à s'assurer que des solutions techniques appropriées ont été trouvées, à mettre sur pied l'organisation adéquate, à prévoir et à résoudre à l'avance les problèmes de commercialisation et autres qui pourront se poser, est largement compensé par les résultats obtenus.

La préparation d'un projet comporte des décisions à prendre, en s'appuyant sur des jugements d'ordre technique, au sujet du site et de l'emplacement de l'installation prévue et, d'une façon plus générale, des caractéristiques techniques appropriées du projet lui-même. C'est au cours de cette préparation qu'il faut entreprendre les enquêtes pédologiques, hydrographiques et hydrologiques du site envisagé pour le projet, et établir dans quelle mesure les ressources naturelles et autres nécessaires à son exécution répondent aux besoins prévus. C'est aussi à ce stade que l'on étudie systématiquement les solutions de rechange. Si, par exemple, un emprunteur soumet à la Banque un projet concernant la construction d'un barrage important destiné à la production d'énergie hydroélectrique, il faut immédiatement se demander si une centrale thermique ne pourrait pas produire une énergie équivalente à un prix moins élevé. Ou bien, s'il s'agit de la construction d'une autoroute bitumée à quatre voies, si une simple route en terre à deux voies, que l'on améliorerait par étapes au fur et à mesure que la circulation augmenterait, ne serait pas, en fait, d'un meilleur rendement? Lorsqu'on envisage un nouveau projet d'irrigation, il convient de mettre dans la balance la possibilité d'améliorer les installations existantes, ou de développer l'agriculture par des procédés ne nécessitant pas de capitaux aussi considérables dans les régions du pays où la pluviosité le permet. Si les bâtiments scolaires prévus dans le cadre d'un projet d'éducation paraissent trop ambitieux, des constructions plus simples pourraient permettre d'économiser des crédits qui pourraient être utilisés à d'autres fins dans le domaine de l'éducation. Au stade préparatoire, il est donc essentiel d'étudier tous les autres moyens possibles d'atteindre les objectifs proposés. C'est là habituellement le rôle des études de justification qui fournissent l'esquisse préliminaire et les autres solu-

tions techniques possibles et font une première évaluation des avantages économiques de chacune d'elles.

Lorsqu'il s'agit d'une entreprise productive, le stade de la préparation comporte également une analyse préliminaire destinée à vérifier que sa situation financière sera satisfaisante. En outre, qu'il s'agisse d'entreprises nouvelles ou d'entreprises déjà établies dont le rendement a jusque-là été médiocre, la préparation d'un projet peut entraîner un travail considérable, en collaboration avec l'emprunteur éventuel, pour améliorer son organisation et sa gestion.

Le rôle de la Banque

C'est à l'emprunteur, et non à la Banque, qu'incombe officiellement la préparation des projets. Dans le passé, ce principe était appliqué à la lettre, et ceci pour de bonnes raisons, notamment à cause du conflit d'intérêts que risque de provoquer le double rôle joué par la Banque, à savoir d'une part, préparer les projets et, d'autre part, prêter les fonds nécessaires à leur exécution. On estimait alors que lorsque la Banque avait préparé un projet, il lui était ensuite difficile de juger objectivement le résultat de son propre travail. Cependant, bien que rationnelle, cette attitude n'a pu résister à la pression des événements. L'expérience a prouvé que la Banque ne reçoit pas suffisamment de projets viables à évaluer si elle ne participe pas de très près à leur recherche, à leur définition et à leur préparation. C'est ainsi qu'au lieu de séparer de façon rigide d'un côté, la définition et la préparation des projets, et de l'autre, l'évaluation et le contrôle de leur exécution, on a un cycle ininterrompu, à tous les stades duquel la Banque participe étroitement. L'un des avantages de ce changement d'attitude est que les projets étant mieux préparés, il arrive plus rarement qu'ils soient rejetés au stade de l'évaluation, encore que la version définitive du projet soit parfois très différente de sa conception initiale.

En pratique, la Banque ne se charge généralement pas de la préparation même du projet, car elle ne dispose pas pour cela du personnel nécessaire; mais elle assume maintenant la responsabilité de veiller à ce qu'il soit bien préparé. Il existe pour cela de nombreux moyens. Certains emprunteurs de la Banque, parmi les plus importants ou les plus avancés, sont tout à fait capables de préparer eux-mêmes leurs projets — surtout après un premier ou un second prêt qui leur ont permis de se familiariser avec les exigences de la Banque — et celle-ci les encourage à le faire. S'ils ne disposent pas pour cela du personnel nécessaire, ils peuvent avoir recours aux services d'une société d'études qui prépare les projets pour leur compte. Sinon, nous pouvons les encourager à faire appel à des consultants pour les aider à préparer des études de justification et les guider dans la sélection du projet. Les études de justification peuvent être financées de plusieurs façons : par l'em-

prunteur lui-même, à l'aide de fonds reçus au titre d'un prêt en cours, d'un prêt-crédit ou d'un crédit («piggyback»); quelquefois, par une subvention ou un crédit de la Banque accordés au titre de l'assistance technique; ou, plus souvent, par une subvention du Programme des Nations Unies pour le Développement, pour lequel la Banque peut agir en tant qu'agent d'exécution. Dans le cas de la FAO et de l'UNESCO, et des missions de la Banque en Afrique, le personnel qui définit le projet aide aussi à le préparer, à moins que des études spécialisées ne soient nécessaires.

On croit souvent à tort que la somme de travail qu'exige la préparation d'un projet varie en proportion directe de ses dimensions. Les petits projets se situent en général dans de petits pays qui, souvent, viennent d'accéder à l'indépendance, et le travail qu'exige la préparation de ces projets est tout à fait hors de proportion avec leurs dimensions. S'il existe une relation entre le montant du prêt que la Banque accorde pour un projet, et les efforts consacrés à sa définition et à sa préparation, ce serait donc plutôt une relation inverse.

EVALUATION

Passons maintenant au stade suivant du cycle d'un projet, celui de l'évaluation. Nous supposons que le projet a été repéré et défini, qu'il a été bien préparé, que les études et rapports sont achevés et que les premières indications sont favorables — autrement dit que le projet est prêt à aller de l'avant. Le stade suivant est ce que nous appelons l'évaluation. C'est peut-être l'aspect du cycle du projet qui est le plus connu, mais ce n'est pas nécessairement le mieux compris. Pendant les premières années d'activité de la Banque, il pouvait arriver que la mission d'évaluation soit notre premier contact avec le projet et l'emprunteur, mais à l'heure actuelle, cette mission se rend normalement sur place au terme d'une longue période d'étroite collaboration dont la durée peut atteindre plusieurs années. L'évaluation reste néanmoins une étape importante du cycle, car c'est à ce stade que l'on étudie de façon approfondie et systématique tous les aspects du projet.

Alors que l'on fait appel au concours de consultants ou d'institutions spécialisées pour la préparation des projets, l'évaluation est presque exclusivement réalisée par le personnel de la Banque. L'évaluation est toujours faite sur place, les études réalisées à partir de documents n'étant pas suffisantes. La difficulté de l'évaluation dépendra dans une large mesure de la façon dont le projet a été préparé. Si la préparation a été bien faite, l'évaluation pourra être relativement facile; dans le cas contraire, la mission qui devait évaluer le projet doit alors s'attaquer à sa préparation, et il faut parfois envoyer sur les lieux une ou plusieurs autres missions pour achever le travail. L'évaluation peut couvrir jusqu'à six aspects d'un projet : les aspects technique, économique, commercial, financier, la gestion et l'organisation.

Aspect technique

Dans le domaine *technique*, la Banque doit avoir la certitude que les solutions de rechange ont fait l'objet d'une étude approfondie, et que des solutions techniques adéquates ont été retenues. Ceci suppose, pour un projet agricole donné, que l'on a choisi la combinaison appropriée de semences, d'insecticides et d'engrais ou, pour un projet d'irrigation, le système de distribution des eaux qui convient; s'il s'agit d'un projet routier, il faut que la largeur de la route, les bas-côtés et l'épaisseur du revêtement répondent aux besoins de la circulation; s'il concerne la construction d'une voie ferrée, que l'on a choisi le meilleur tracé; s'il s'agit d'installations portuaires, que les postes de mouillage et la profondeur du dragage correspondent au tonnage des navires qui mouillent dans le port; si le projet concerne l'éducation, il faut que le nombre et la disposition des salles de classe et des laboratoires conviennent au nombre d'élèves attendu et au programme d'enseignement envisagé. Cette liste pourrait s'étendre indéfiniment. Tous les détails des plans du projet, les estimations des coûts et l'horaire prévu pour la construction sont examinés à nouveau et confirmés, ou révisés lorsque cela est nécessaire.

Aspect économique

L'un des principaux objectifs de la mission d'évaluation est de s'assurer que les solutions techniques trouvées sont les meilleures. Ceci touche de très près à l'aspect *économique* de l'évaluation. Bien que la Banque ait financé une usine d'énergie nucléaire, des véhicules de transport aussi avant-garde que l'hydrofoil, et les installations portuaires les plus modernes équipées pour la manutention des containers, nous ne cherchons pas la solution technique la plus avancée, mais celle qui convient le mieux à la situation du pays en voie de développement. Pour cela, il faut parfois ramener à des dimensions plus modestes et plus réalistes les projets trop ambitieux d'une utilité douteuse, afin qu'ils puissent mieux contribuer au développement du pays. Il arrive parfois que ce soit l'inverse, et il faut alors trouver le moyen d'accroître les dimensions techniques d'un projet — par exemple en créant pour ses produits de nouveaux marchés — avant que la solution technique adoptée soit économiquement rentable. C'est l'économiste en mission d'évaluation qui est chargé d'effectuer l'analyse coûts-bénéfices des diverses solutions techniques envisagées afin d'arriver à celle dont le rendement économique est le meilleur. Il est fréquent que cette analyse soit effectuée par étapes successives au cours de la préparation du projet, mais c'est au moment de l'évaluation que l'on procède à l'examen définitif et que l'on compare la valeur respective des différentes solutions possibles.

En examinant l'aspect économique, il serait peut-être bon que j'explique en quelques mots l'optique dans laquelle la Banque considère un projet, car cela permet de mieux comprendre le rôle de l'économiste. La Banque a une conception assez générale de ce que doit être un projet. Elle essaye d'établir, à un moment donné, la relation optimum entre le projet, le secteur de l'économie dont il relève et le programme global de développement du pays considéré. Tout d'abord, nous tenons à nous assurer que les secteurs auxquels nos prêts sont destinés bénéficient d'une priorité élevée dans le développement économique du pays; c'est là le travail des missions économiques qui passent en revue la stratégie globale du développement. Nous nous assurons ensuite que dans chacun des secteurs faisant l'objet d'un prêt, les projets que nous finançons sont affectés d'une priorité élevée. Ceci est accompli par les études sectorielles ou les missions de définition des projets, ou de toute autre manière mentionnée plus haut.

Lors de l'évaluation du projet, le rapport étudie généralement la relation qui existe entre le projet, le secteur dont il relève et l'ensemble de l'économie. Pour les projets de transport, par exemple, chaque rapport d'évaluation décrit le réseau des transports dans son ensemble et précise l'importance qu'il présente pour le développement économique du pays. Si le projet concerne la construction d'une autoroute, le rapport examinera sa relation avec le réseau ferroviaire, et vice versa. La Banque étudie en même temps la politique suivie dans l'ensemble de ce secteur. Si certaines politiques publiques lui paraissent s'opposer à l'expansion des transports, que ce soit par des autoroutes ou tout autre moyen, la mission d'évaluation les examinera de façon approfondie et nous nous efforcerons, au cours de la négociation du prêt, d'amener les autorités à les modifier. Dans les secteurs de l'éducation, de l'énergie et des télécommunications, le «projet», tel que le conçoit la Banque, peut englober le programme d'investissement du secteur tout entier et lui est de toute façon étroitement rattaché; dans le secteur agricole, qui est plus diversifié et représente une proportion beaucoup plus élevée de l'activité économique du pays, il est moins facile d'intégrer chaque projet dans une stratégie globale couvrant l'ensemble du secteur, mais nous nous efforçons de plus en plus d'y parvenir.

Aspect commercial

Le troisième aspect dont tient compte l'évaluation est l'aspect *commercial*, lequel est particulièrement important pour les entreprises productives. Les considérations d'ordre commercial comprennent toutes les dispositions concernant les achats et les ventes liés au projet. La Banque veille à ce que les méthodes utilisées pour l'obtention des biens et services nécessaires à l'exécution du projet garantissent à l'emprunteur les meilleures conditions de prix et de qualité; ceci suppose, en général, le

recours à des adjudications concurrentielles internationales, dont nous reparlerons plus loin. L'évaluation commerciale comprend aussi une évaluation de la demande sur le marché pour les produits issus du projet, de l'efficacité du réseau de commercialisation et de l'approvisionnement en matières premières, en main-d'œuvre et en autres ressources nécessaires au fonctionnement du projet.

Aspect financier

Il va de soi que l'aspect *financier* est étroitement lié à l'aspect commercial. L'étude d'une entreprise productive est très complète et couvre tous les aspects financiers importants du projet, mais on peut, pour les besoins de la discussion, considérer ces deux aspects séparément. L'une des préoccupations de la Banque est qu'il y ait suffisamment de fonds pour la construction du projet. La Banque ou l'IDA n'ont pas l'habitude de prêter la totalité des fonds nécessaires à l'exécution d'un projet; elles peuvent le financer à 10 ou 20 pour cent de son coût total, ou aller jusqu'à 70 ou 80 pour cent, mais jamais à 100 pour cent. L'emprunteur doit donc fournir une partie des fonds. Pour les projets importants, il peut arriver que l'emprunteur n'apporte pas lui-même la totalité de la différence, mais qu'il fasse appel à d'autres sources de crédit, par exemple aux organismes nationaux des pays exportateurs de capitaux. L'évaluation peut aussi avoir pour objet de s'assurer qu'il existe un plan de financement qui fournisse les fonds nécessaires à la construction du projet dans les délais prévus. Lorsque l'emprunteur est un gouvernement dont les difficultés budgétaires sont connues, nous pouvons lui suggérer des dispositions spéciales, notamment des ouvertures de crédit anticipées ou l'affectation de certaines recettes fiscales, pour le financement nécessaire en temps utile.

L'autre problème financier est de savoir si, une fois en activité, l'entreprise créée pourra faire face à ses obligations financières. Etant donné que nous accordons habituellement le prêt directement à l'entreprise qui exécute le projet, il est naturel que nous nous préoccupions en premier lieu de savoir si celle-ci pourra rembourser sa dette envers la Banque. Mais nous voulons également nous assurer que l'entreprise est capable de s'acquitter de toutes ses obligations financières, qu'elle dispose de fonds de roulement suffisants et que sa capacité d'auto-financement est suffisante pour lui permettre de financer une proportion raisonnable de ses besoins futurs en capitaux. Nous analysons donc de façon approfondie la situation financière de l'entreprise et établissons des projections de son bilan, de son compte profits et pertes et de ses flux de liquidité. Lorsque les données comptables existantes ne permettent pas de réaliser cette étude, la Banque peut subordonner son prêt à l'adoption d'une nouvelle méthode de comptabilité.

L'étude financière fait souvent apparaître la nécessité d'ajuster la structure — et plus particulièrement le niveau — des prix pratiqués par l'entreprise. Qu'elles soient ou non sous le contrôle de l'Etat, les entreprises financées par la Banque fournissent en général des services essentiels et sont assujetties à un contrôle rigoureux du gouvernement. Etant donné que ce dernier peut désirer, pour des raisons de politique, subventionner la fourniture de ces services au public, il sera peu disposé à autoriser les relèvements de tarif nécessaires pour assurer la rentabilité de l'entreprise. Toutefois, leur rentabilité financière est la condition *sine qua non* à laquelle la Banque subordonne tout octroi de prêt à des entreprises productives, et la question de l'ajustement des tarifs peut être un facteur déterminant pour l'évaluation.

Gestion

Le cinquième aspect considéré pour l'évaluation d'un projet est sa *gestion*. A cet égard, la Banque se préoccupe, d'une part, de la compétence des cadres supérieurs nécessaires pour diriger la construction du projet et en assurer ensuite la gestion, et d'autre part, de celle de tout le personnel de l'entreprise ou de l'organisation. Dans certains pays, cette question est parfois très épineuse. Quelquefois les difficultés sont causées par un excédent de personnel, comme par exemple lorsque la concurrence de la route oblige une société nationale de chemins de fer à réduire ses services, et qu'elle doit établir un plan pour le licenciement échelonné d'une partie de ses employés. Il peut arriver au contraire que le personnel local soit insuffisant ou qu'il n'ait pas les compétences nécessaires pour pourvoir les postes-clés de la hiérarchie, de sorte qu'il faut recourir à l'aide extérieure jusqu'à ce que l'on puisse former des cadres locaux. Il est très difficile de trouver, à un moment déterminé, le dosage idéal de consultants et de conseillers étrangers, d'une part, et de personnel et de cadres locaux, d'autre part. Tous les contrats de prêt comportent maintenant une clause stipulant que des consultations auront lieu entre l'emprunteur et la Banque pour le choix des cadres supérieurs.

Organisation

Le dernier des six aspects considérés pour l'évaluation, celui de l'*organisation*, concerne la structure administrative de l'entreprise ou de l'organisme qui réalise le projet. Une entreprise productive publique doit, à notre avis, jouir d'un certain degré d'autonomie pour administrer ses affaires. Elle doit être exempte de tout ingérence politique et de la rigidité parfois inhérente aux organismes qui sont administrés directement par l'Etat. C'est pourquoi, si le fonctionnaire de la Banque qui s'occupe de l'organisation examine surtout le degré d'autonomie dont jouit l'entreprise, l'enquête de la

Banque ne s'arrête pas là et a aussi pour objet de veiller à ce que l'ensemble de sa structure interne, son articulation hiérarchique, l'organisation de chaque service, l'exécution des décisions, la répartition des responsabilités à l'intérieur de l'organisation, soient raisonnablement efficaces.

Cette préoccupation d'ordre plus général ne concerne pas seulement les entreprises productives, mais toute organisation qui bénéficie d'un prêt de la Banque. C'est ainsi que l'octroi de plusieurs prêts ou crédits pour la construction d'autoroutes a entraîné la réorganisation du service des ponts et chaussées. De plus en plus, les prêts de la Banque au secteur agricole s'accompagnent d'une réforme des institutions existantes ou de la création de nouvelles, par exemple pour l'exécution d'un projet concernant l'élevage.

Telles sont les principales catégories de problèmes qui se posent au cours de l'évaluation. Nous efforçant sans cesse d'améliorer nos méthodes et nos techniques d'évaluation, nous avons maintenant recours à l'analyse de systèmes pour faire notre choix entre plusieurs solutions possibles. Nous employons de plus en plus l'analyse des risques et des probabilités dans la détermination du rapport coûts-bénéfices afin de réduire l'élément d'incertitude que comporte souvent l'estimation du coût d'un projet. Lorsque les prix du marché ne reflètent pas les véritables coûts économiques, on utilise des prix théoriques. Nous nous efforçons aussi de nous tenir au courant des progrès de la technologie et de la technique et de les faire mettre en pratique aussi rapidement que les circonstances le permettent. La portée et la teneur du processus d'évaluation se trouvent ainsi peu à peu modifiées en fonction de l'évolution connexe de la technologie, de la science économique et des finances.

Nous avons décrit les méthodes utilisées pour la définition des projets, leur préparation et leur évaluation sur les lieux. De retour à Washington, la mission d'évaluation écrit son rapport qui est alors étudié et revu par les services de la Banque. Lorsque ce rapport est définitivement approuvé, s'ouvre la phase des négociations.

NEGOCIATIONS

La phase des négociations est celle au cours de laquelle la Banque et l'emprunteur cherchent à se mettre d'accord sur les diverses dispositions qui, selon le rapport d'évaluation, sont indispensables pour assurer la réussite du projet; ces dispositions deviennent alors des obligations juridiques et sont énoncées dans l'accord de prêt. Supposons, par exemple, que les recettes d'un service public soient insuffisantes en raison du tarif trop bas fixé pour l'électricité et que la Banque ait obtenu de l'emprunteur que ces tarifs soient relevés, disons de 20 pour cent immédiatement et de 10 pour

cent deux ans après, afin d'améliorer le taux de rentabilité dudit service public pour qu'il soit en mesure de financer une part raisonnable de ses nouveaux investissements. On met alors au point, au cours des négociations, une convention financière qui définit les objectifs financiers globaux du service public et spécifie le taux de rémunération à atteindre ainsi que le calendrier des relèvements de tarif. Les dispositions prises en ce qui concerne la gestion, l'organisation, la commercialisation — en fait toutes les questions soulevées avant et pendant l'évaluation — figurent dans l'accord de prêt. Par exemple, s'il est décidé qu'une route ne sera pas bitumée mais seulement recouverte de gravier, ceci sera stipulé dans la description du projet. Si une partie quelconque du projet nécessite l'intervention de consultants, l'emprunteur conviendra de recruter et d'employer pendant la durée prévue les consultants agréés par la Banque. Les négociations et la rédaction des documents juridiques constituent donc un aspect essentiel du processus qui permet à la Banque de s'assurer que les conclusions de l'évaluation donneront lieu à des mesures qui seront convenues avec l'emprunteur et qu'il les mettra en œuvre dans les délais acceptables.

A l'issue des négociations, les mesures convenues par les deux parties sont incorporées dans le rapport d'évaluation qui, ainsi mis à jour, est adressé avec les pièces du dossier aux Administrateurs de la Banque. Si le Conseil d'administration approuve l'opération, l'accord de crédit ou de prêt est alors signé au cours d'une simple cérémonie qui marque la fin d'un stade du cycle et le commencement d'un autre.

CONTROLE DE L'EXECUTION

La dernière phase du cycle d'un projet est celle du contrôle exercé d'abord sur sa construction, puis sur sa gestion. L'objet de ce contrôle est de veiller à ce que le projet soit exécuté tel qu'il a été prévu, ou modifié en fonction de l'évolution de la situation, de façon à réaliser les objectifs fixés pour le développement.

Le contrôle est la phase la moins prestigieuse du cycle des projets. Dès qu'ont pris fin les cérémonies qui accompagnent la signature d'un accord de prêt ou de crédit, les planificateurs et les responsables de la politique tournent leur attention vers de nouveaux projets; cette attitude est d'autant plus compréhensible qu'il peut s'écouler de nombreux mois avant que le projet pour lequel les fonds ont été accordés commence à donner des résultats tangibles. Le contrôle est néanmoins un stade très important du processus. Il est évident que, aussi parfaites qu'aient pu être la définition, la préparation, l'évaluation, et les négociations d'un projet, c'est seulement s'il est bien exécuté qu'il apportera au développement du pays la contribution attendue. En outre, le développement est, par définition, un phénomène dynamique, et les circonstances dans lesquelles un projet est exécuté peuvent ne pas coïncider en tous

points avec celles prévues lors de l'évaluation. Un aspect important du processus de contrôle pourra donc consister à adapter le projet à ces nouvelles circonstances et, à cet égard, le terme «contrôle» est employé à tort car il ne couvre qu'une partie du travail accompli. C'est pourquoi nous avons décidé qu'il faut accorder la priorité la plus élevée au contrôle de l'exécution lorsqu'on affecte le personnel nécessaire au projet.

Comme les autres phases du cycle, le contrôle est exercé de diverses façons. Pendant les négociations, la Banque a convenu avec l'emprunteur d'un calendrier pour l'envoi des rapports qu'il doit préparer sur l'avancement des travaux et qui la renseignent sur l'exécution proprement dite du projet, son coût et, s'il s'agit d'une entreprise productive, sur la situation financière de l'emprunteur. Ces rapports sont généralement envoyés à des intervalles de trois ou six mois et peuvent être préparés soit par l'emprunteur lui-même soit par ses consultants. Ils sont étudiés à Washington par l'équipe même qui a suivi toutes les phases du cycle du projet, et les problèmes signalés par les rapports font d'abord l'objet d'un échange de correspondance.

Un point essentiel du contrôle d'un projet est la passation des marchés de biens et services financés par le prêt ou le crédit. L'un des rôles les plus importants de la Banque est de s'assurer que ces marchés sont conformes aux directives qui ont été établies à cet effet et qui sont publiées dans une brochure à large diffusion. Ces directives sont destinées à assurer que les marchés de travaux sont passés, et l'équipement nécessaire acheté, aux meilleures conditions de prix et de qualité. Le principal procédé mis peu à peu au point à cette fin au cours d'une très longue période est l'appel d'offres international, envoyé aux entreprises ou industriels qualifiés. Les directives indiquent en détail les modalités de ces appels d'offre. Veiller à ce que ces règles soient mises en pratique — un seul prêt ou crédit peut donner lieu à plusieurs centaines de contrats distincts qui devront peut-être tous être vérifiés par nos services — est une tâche de longue haleine à laquelle la Banque attache beaucoup d'importance. Cette vérification est parfois relativement facile et ne soulève pas de complications; d'autres fois, au contraire, elle peut constituer un problème majeur comme, par exemple, dans le cas d'un projet de télécommunications ou de production énergétique où les commandes sont passées par tranches de 5, 10 ou 15 millions de dollars; il peut alors être très difficile de déterminer lequel des divers fournisseurs internationaux a présenté l'offre la plus avantageuse. Il convient de préciser que c'est l'emprunteur, et non la Banque, qui est chargé de comparer les soumissions d'offres. Le rôle de la Banque est de vérifier le travail de l'emprunteur pour s'assurer qu'il a été bien fait et que les règles ont été observées. Le marché ne peut être passé qu'après accord de la Banque, et en cas de différend, la Banque en est aussitôt informée.

Les travaux que je viens de décrire sont ceux qui sont effectués principalement au siège de la Banque. Celle-ci envoie aussi sur les lieux des missions dites de «contrôle» qui sont chargées de constater l'état d'avancement du projet et les difficultés rencontrées dans son exécution. La fréquence de ces visites varie selon la nature du projet. La Banque envoie, en moyenne, une mission de ce genre tous les neuf mois pour les projets en cours de réalisation. Nous aimerions faire mieux, et nous prenons actuellement des mesures pour augmenter la fréquence de ces missions. L'idéal serait d'envoyer de telles missions sur les lieux deux ou trois fois par an, nous pourrions travailler en plus étroite collaboration avec nos emprunteurs pour résoudre rapidement les problèmes qui peuvent se poser et veiller à ce que le projet avance rapidement et donne les meilleurs résultats. Dans les récapitulations périodiques du travail de contrôle effectué par la Banque, certains projets (à l'heure actuelle, 10 pour cent environ du total) sont classés dans une catégorie spéciale dite «projets-problèmes» qui font l'objet d'une attention particulière et reçoivent des visites plus fréquentes.

Le contrôle est un processus où l'on apprend par expérience. Nous mettons à profit les leçons que nous tirons ainsi, non seulement pour modifier, le cas échéant, les projets en cours d'exécution, mais aussi pour formuler à l'avenir des projets semblables. Aussi les résultats donnés par les projets de la Banque sont-ils continuellement évalués pendant le processus de contrôle. Nous estimons cependant que cette évaluation ne peut pas remplacer un examen général destiné à comparer, après une période d'activité suffisamment longue, les résultats effectifs aux prévisions initiales. Plusieurs de ces examens ont été effectués par la Banque, ou sont actuellement en cours; celle-ci envisage d'en effectuer davantage à intervalles réguliers. Nous avons aussi travaillé en collaboration avec divers groupes extérieurs qui ont procédé, indépendamment, à l'étude de projets de la Banque.

La mission de contrôle doit, entre autres tâches, examiner les études préparatoires des futurs projets inclus (projets «piggyback») dans le prêt ou le crédit accordé. Elle nous permet aussi d'entretenir avec nos clients des relations d'où peuvent surgir de nouveaux projets qu'il ne nous reste plus qu'à définir et à présenter. C'est ainsi que le contrôle conduit à la définition et à la préparation, et le cycle recommence.

Nous avons constaté que pour aider à préparer et à exécuter des projets qui contribueront au développement, la Banque doit entrer dans ce cycle dès la première phase et y demeurer jusqu'à la fin.

Malgré les divergences d'opinion qui se font inévitablement jour lorsqu'il faut se mettre d'accord sur les solutions à apporter à des problèmes difficiles, les relations qui se sont établies entre la Banque et la plupart

RECAPITULATION DU CYCLE

Les principaux points que j'ai essayé de faire ressortir sont les suivants :

- le nombre relativement faible, mais croissant, d'opérations de prêt que nous entreprenons chaque année;
- la grande diversité des projets pour lesquels nous accordons des prêts ou des crédits;
- les voies très diverses que suivent ces projets au cours des diverses phases du cycle;
- la variété des projets auxquels s'intéresse la Banque, du projet de développement au projet individuel en passant par le projet sectoriel;
- l'importance que revêt le contrôle des projets
- et, en particulier, l'étroite collaboration qui s'établit entre la Banque, le gouvernement et l'emprunteur à tous les stades du cycle des projets.

de ses clients au cours de ces opérations sont devenues excellentes. Ceux-ci ont pu se rendre compte que la Banque n'avait pas d'intérêts personnels à servir, qu'elle a été créée pour les aider à réaliser leur développement en leur accordant des prêts pour des projets bien conçus et bien exécutés, et que la réalisation de cet objectif est le principal — en fait, le seul — intérêt que présente pour elle l'exécution d'un projet.

El ciclo de los proyectos

En este artículo—que es uno de los más importantes que hayan aparecido hasta la fecha en Finanzas y Desarrollo—el Subdirector de Proyectos del Banco Mundial explica en lenguaje accesible cómo el Banco lleva a cabo sus actividades más características: la selección, preparación, evaluación y supervisión de proyectos para el desarrollo económico.

Warren C. Baum

SI TUVIERA que responderse en pocas palabras a la pregunta, "¿Qué hace el Banco Mundial?", podría sencillamente contestarse: "Otorga préstamos para proyectos de desarrollo". La actividad primordial del Banco es financiar proyectos específicos, seleccionados y preparados con todo cuidado y minuciosamente evaluados, y sujetos a constante supervisión. El Banco y, a partir de 1961, su afiliada la Asociación Internacional de Fomento (AIF), la cual ofrece crédito en condiciones más favorables, han otorgado desde su fundación unos 950 préstamos y créditos¹ por un monto total de unos US\$17.000 millones; de estos, la gran mayoría han sido para financiar proyectos específicos como escuelas, presas para riegos, centrales eléctricas y caminos. Por ejemplo, en el ejercicio económico de 1969 se autorizó el número sin precedentes de 111 préstamos y créditos que, con una sola excepción, fueron en su totalidad para proyectos específicos. Esta importancia especial que se atribuye a los préstamos para proyectos se debe a que el Convenio Constitutivo del Banco dispone que, salvo en circunstancias especiales, los préstamos que éste otorgue se destinarán a proyectos específicos de reconstrucción o de fomento.

El que los préstamos se destinen a proyectos específicos tiene por objeto garantizar que los fondos del Banco se inviertan en proyectos útiles y productivos a fin de que sirvan para aumentar la capacidad de reembolso del país y que contribuyan a la vez al desarrollo de su economía. Es en la afinidad que existe entre estos dos designios donde las funciones del Banco como institución financiera internacional se combinan

¹ Los préstamos son otorgados por el Banco a una tasa de interés que en la actualidad es del 7 por ciento; los créditos los ofrece la AIF en condiciones favorables, ya que son a 50 años de plazo y el cargo por servicios es de 0,75 por ciento. El método de tramitación que siguen ambas instituciones en lo que se refiere a proyectos es idéntico, de modo que cualquier referencia que se haga en este artículo al Banco o a sus préstamos se aplica igualmente a la AIF y a sus créditos.

con las que ha venido desempeñando cada vez más como institución consagrada al desarrollo.

Aun teniendo en cuenta el monto sin igual de crédito otorgado recientemente, y el hecho de que se prevé la concesión de cantidades aún mayores en el futuro, el Banco y la AIF se ocupan, y seguirán ocupándose, de un número relativamente reducido de operaciones relacionadas con proyectos. Típicamente se trata de obras de gran envergadura, cuyo costo por lo general asciende a millones de dólares. La gama de actividades que abarcan es muy diversa, pues entre ellos figuran desde proyectos tales como el de la plantación de palma de aceite en Papua y Nueva Guinea hasta la construcción de la línea férrea para el tren rápido de Tokaido en el Japón. No hay dos proyectos idénticos; todos tienen su historial propio y exigen que el proceso de concesión de crédito se adapte a cada uno de ellos. Las técnicas y los procedimientos en la esfera de la concesión de préstamos para proyectos se reexaminan y revisan continuamente con la mira de alcanzar la máxima perfección posible. De modo que el trabajo relacionado con proyectos entraña grandes dificultades, pero, por otra parte, constituye motivo de grandes satisfacciones.

Dicho trabajo, tal como se realiza en el Banco, es una especie de ciclo de actividades autosostenidas y consecutivas que abarca cuatro etapas principales. En la primera se concreta el proyecto, esto lleva a la segunda etapa, que comprende los preparativos necesarios hasta que el proyecto quede listo para la tercera etapa, que es su evaluación; luego, si el resultado de la evaluación es positivo, se lleva entonces a cabo la negociación y firma del compromiso de préstamo y, una vez hecho esto, viene la cuarta etapa que es la tarea de supervisar la construcción y funcionamiento del proyecto a fin de asegurarse de que se lograrán los objetivos que se tenían en mira.

La razón por la que se considera que este proceso constituye un ciclo es que cada fase no solamente es resultado de las que le preceden sino que lleva a las que le siguen; así que lo que se trata de hacer es que el ciclo se renueve constantemente y que los nuevos proyectos se produzcan por sucesión continuada de los que les preceden.

DETERMINACION

Lógicamente el ciclo tiene que comenzar por determinar el proyecto que se va a financiar. Para esto se lleva a cabo un estudio más o menos preliminar de los proyectos prioritarios que pudieran ser aptos para que el Banco los financie, y en los que el prestatario, el Banco y el Gobierno han mostrado interés. Básicamente hay tres comprobaciones que se aplican en esta etapa. La primera de ellas tiene por objeto cerciorarse de si el sector correspondiente de la economía y el proyecto mismo tienen carácter prioritario en los planes de desarrollo del gobierno; la segunda es para asegurarse de si *prima facie* el proyecto parece factible, es decir, si mediante el proyecto se podría encontrar la solución técnica al problema a un costo conmensurable con los beneficios que se espera obtener; y la tercera tiene por finalidad averiguar si el gobierno está dispuesto a respaldar financieramente el proyecto o a apoyarlo por otros medios. Esto obedece al hecho de que los préstamos se otorgan ya sea a los gobiernos o entidades oficiales, o a entidades privadas, con el apoyo y la garantía del gobierno.

¿Qué procedimiento de determinación se emplea? La respuesta a esta pregunta no es sencilla. Así como hay una gran diversidad de proyectos para los cuales se otorgan préstamos, existe asimismo una gran variedad de modos en que el Banco conoce acerca de los proyectos, determina su viabilidad y se proponen.

El modo más directo de obtener un proyecto nuevo es el de conceder nuevos préstamos al mismo prestatario para la ejecución de etapas posteriores del mismo proyecto o de otro similar. Como el Banco tiene ya más de 20 años de existir es de suponer que lleva a cabo algunas de sus operaciones con antiguos prestatarios. Esto sucede especialmente en lo que respecta a los sectores que tradicionalmente ha financiado, como la energía eléctrica y el transporte. Ejemplos clásicos de esto son los diez préstamos y créditos otorgados a la Indian Railways con el fin de financiar segmentos anuales o bianuales sucesivos de su programa de inversiones, y los siete préstamos que se han otorgado a la Comisión Federal de Electricidad para financiar varias etapas de expansión del sistema de energía eléctrica mexicano. De modo que un gran número de los nuevos proyectos provienen de las continuas relaciones que se mantienen con los prestatarios, ya que

los nuevos proyectos se determinan y originan como resultado de la supervisión de otros ya existentes.

No quiero dar la impresión de que como los préstamos así originados son fáciles de seleccionar, son naturalmente fáciles de preparar y negociar. A veces sucede así y, si el proyecto original marcha bien, el segundo quizá resulte relativamente fácil. Pero a veces sucede lo contrario, pues el primer préstamo se efectúa hasta cierto punto a base de confianza, conociendo apenas a la entidad prestataria, la cual puede ser una institución creada como parte del proyecto o una entidad con la cual el Banco empieza a familiarizarse. En esos casos se llega a un acuerdo sobre los diversos objetivos y se contraen ciertos compromisos; no obstante, puede luego suceder que el proyecto no marche tan bien como se esperaba. De ser así, la concesión de otro préstamo puede llevar tres, cuatro e incluso cinco años debido a que es preciso resolver los problemas que surgieron con el primer préstamo, y que el Banco esté relativamente satisfecho con los resultados obtenidos, antes de que esté dispuesto a conceder otro préstamo. En consecuencia, aunque los nuevos préstamos concedidos a un mismo prestatario son fáciles de tramitar, otros presentan muchas dificultades.

Operaciones de préstamo "concatenadas"

Estas operaciones son una variante de los préstamos que acabamos de mencionar. Una de las mejores formas de lograr que no haya solución de continuidad en los ciclos es la de incluir en un préstamo para un proyecto concreto los fondos necesarios para efectuar los estudios de factibilidad o de ingeniería de proyectos ulteriores. Por ejemplo, si el Banco está financiando la construcción de una presa como primera etapa de expansión de un sistema de energía eléctrica, el préstamo puede muy bien incluir los estudios necesarios para concretar y preparar las etapas sucesivas del programa de energía eléctrica.

Misiones

Hay también otros medios que permiten llevar a cabo la determinación de los proyectos. Por ejemplo, a veces el Banco envía misiones especiales a los países a estudiar los sectores a los que no ha otorgado aún financiamiento. Se envía un grupo de especialistas para que lleven a cabo un reconocimiento preliminar del sector con el fin de averiguar si hay algún proyecto que merezca la pena financiar. En la esfera agrícola y en la de la educación mantenemos relaciones de carácter oficial con otros organismos especializados de las Naciones Unidas que se encargan de concretar y preparar los proyectos respectivos. En lo que se refiere a la agricultura, es la Organización de las Naciones



Un objetivo de alta prioridad para el desarrollo económico de un país es que existan vías de comunicación transitables en todo tiempo entre la zona agrícola y la costa. A este respecto cabe preguntarse si lo que conviene hacer es mejorar el camino de tierra que ya existe o construir una nueva ruta que siga un derrotero distinto, o estudiar qué posibilidades hay de construir una vía férrea. La elección entre estas alternativas requiere la formulación de un proyecto de desarrollo que comprende la etapa de DETERMINACION del proyecto.

Unidas para la Agricultura y la Alimentación (FAO) la que se encarga de enviar las misiones que efectúan el trabajo de determinación para el Banco, y de ayudar a preparar los proyectos que han sido determinados. En la FAO hay un numeroso grupo de funcionarios que se dedican exclusivamente a realizar esos trabajos para el Banco, y los gastos correspondientes son sufragados por ambas instituciones. La Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO) presta servicios semejantes al Banco en el campo de la educación.

Una indicación de la importancia que se atribuye a la selección de proyectos puede verse en Africa, que es

la región del mundo que más recientemente ha recibido préstamos del Banco. Se han establecido misiones en el Africa oriental y occidental, con sede en Nairobi y Abiyán respectivamente; esas misiones se ocupan de todos los países situados al sur del Sahara. El mandato de estas misiones consiste en ayudar a determinar y preparar los proyectos que han de recibir financiamiento del Banco y de la AIF, y ya han logrado preparar toda una serie de proyectos, de los cuales muchos de ellos están llegando a la etapa de financiamiento.

Otra manera importante de concretar los proyectos es a través del trabajo que realizan las misiones

económicas. El Banco envía periódicamente a los países miembros en desarrollo misiones económicas para diversas finalidades, una de las cuales es la de estudiar los sectores principales de la economía con el fin de establecer un orden de prioridades en lo que respecta a los problemas relacionados con el desarrollo y determinar qué proyectos podrían recibir financiamiento del Banco.

Otros medios

Por último, hay algunos proyectos en cuya determinación no interviene el Banco ya que son sometidos generalmente por nuevos prestatarios que están interesados en recibir su ayuda, o por entidades del sector privado. Por ejemplo, puede suceder que cuando una empresa internacional dedicada a la industria siderúrgica o a la del aluminio está estudiando la posibilidad de realizar inversiones con el fin de explotar recursos minerales en África, someta a la consideración del Banco, de motu proprio, un proyecto con el objeto de conseguir su intervención para poder obtener más capital y, al mismo tiempo, para contar con la seguridad que implica la presencia del Banco.

Pero, por lo general, el trabajo de determinación tiene que hacerse en el propio Banco. Dado que McNamara ha anunciado que el Banco pretende aumentar sus préstamos, las actividades relacionadas con la selección de proyectos están adquiriendo cada día mayor auge como medio de disponer de una serie de proyectos que puedan financiarse en años venideros.

PREPARACION

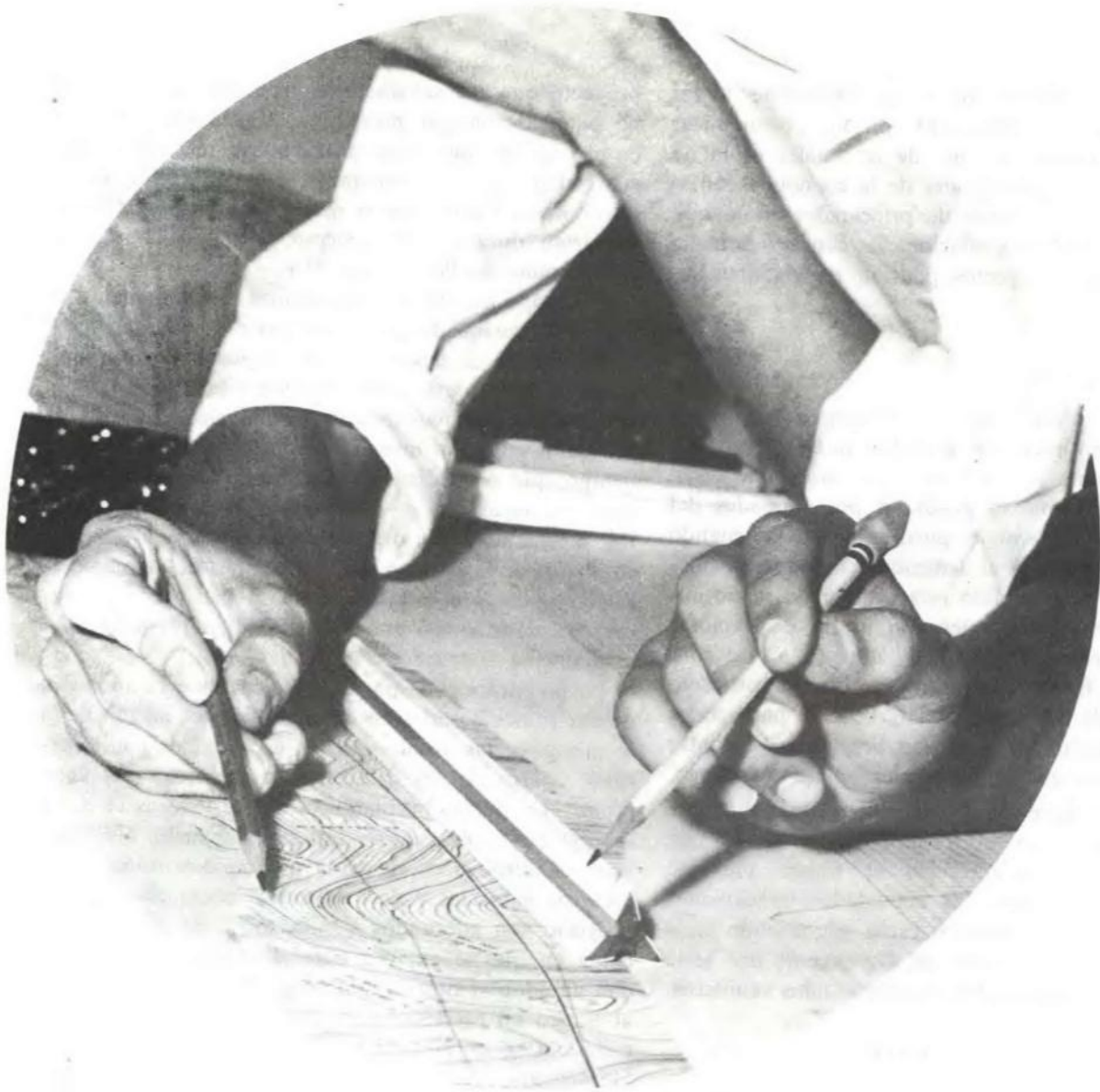
Una vez que el proyecto ha sido determinado pasa a formar parte de la cartera de proyectos, y se inicia un largo período de estrecha colaboración entre el Banco y el presunto prestatario. Esta fase del ciclo de los proyectos es la más difícil de describir ya que depende de la naturaleza de éstos, de la experiencia del prestatario, de las relaciones que el Banco mantiene con éste y con el país respectivo, y de otros muchos factores. Es preciso subrayar nuevamente la gran diversidad de proyectos que existen y el hecho de que cada uno de ellos tiene sus propias características.

La etapa de "preparación" abarca todos los trámites necesarios para establecer la factibilidad del proyecto desde el punto de vista técnico, económico y financiero, de modo que quede listo para su evaluación. Si se trata de un préstamo concedido a un prestatario ya conocido por el Banco, y el proyecto para el cual se le concedió financiamiento ha dado buenos resultados, el tiempo que lleva su preparación puede ser de unos pocos meses. Por otra parte, si ha habido grandes dificultades tanto en concretar el proyecto con el prestatario como en ayudarlo a preparar un

proyecto que sea satisfactorio, o si por otras razones no se puede otorgar préstamos al país (por ejemplo, en el caso de que tenga primero que mejorar el funcionamiento de su economía), la preparación puede llevar hasta cinco años o más. Algunos proyectos se descartan durante este proceso, y el préstamo o el crédito nunca se llega a conceder.

El tiempo que llevan los trámites de preparación es motivo frecuente de queja por parte de los gobiernos de los países en desarrollo que lógicamente quisieran pasar de la etapa de determinación a la fase en que el proyecto recibe financiamiento. Pero, normalmente, los proyectos entrañan inversiones de larga duración, y el tiempo que se dedica a asegurarse de que las soluciones técnicas que se han encontrado son las correctas, a establecer una organización idónea, y a prever y combatir de antemano los problemas de comercialización y de otra índole, compensa generalmente con creces los esfuerzos que se realizan en preparar adecuadamente el proyecto.

La preparación de un proyecto requiere la adopción de decisiones basadas en criterios técnicos acerca de la localización, las instalaciones y, en términos más generales, acerca de las características técnicas que debe reunir el proyecto propiamente dicho. Esta es la etapa en que es preciso realizar estudios del suelo, hidrográficos e hidrológicos, y en la que se determina si los recursos naturales y de otra índole necesarios para el proyecto son adecuados y suficientes. Es asimismo la etapa en que se explora sistemáticamente la posibilidad de adoptar otras alternativas. Por ejemplo, si llega al Banco un prestatario con una propuesta para construir una gran presa para la producción de energía hidroeléctrica, una de las primeras cuestiones que hay que dilucidar es la de si una central térmica podría producir el mismo volumen de energía a un costo inferior; también puede suceder que un proyecto sea para la construcción de una carretera asfaltada de cuatro pistas, cuando en realidad un camino de grava, que se vaya mejorando en diversas etapas a medida que el tráfico aumente, resultaría mucho más conveniente. Cuando se trata de un proyecto de riego es preciso considerarlo en relación con otras alternativas, como son la de mejorar el sistema de riego existente o la de fomentar los cultivos en las zonas del país de agricultura de secano valiéndose de medidas que no requieran uso tan intensivo de capital. Otro ejemplo pudiera ser el de que las escuelas que se proyecta construir sean excesivamente ostentosas, cuando la construcción de edificios más modestos permitiría ahorrar fondos que podrían invertirse en otros aspectos del sistema de enseñanza del país. Por lo tanto, en la etapa preparatoria es de vital importancia estudiar todas las posibilidades que permitirían lograr los objetivos que se tienen en mira. Esto se hace ordinariamente por medio de los llamados estudios de factibilidad, que contienen



Se opta por mejorar el camino. Es necesario entonces decidir el trazado exacto; si la superficie del camino debe ser asfaltada o de grava; cuántas pistas habrá de tener; qué anchura deben tener los bordes del mismo; qué requisitos hay que tener en cuenta para el diseño de puentes; cuáles son las ventajas que pueden derivarse de gastar más en construir mejor la carretera y menos en mantenimiento. En fin, hay una multitud de decisiones tanto técnicas como económicas y financieras que forman parte de la PREPARACION de un proyecto.

los planos y aspectos técnicos preliminares referentes a otras soluciones, y la evaluación preliminar de los beneficios económicos que se derivarían de optarse por cualquiera de ellas.

Si se trata de una empresa lucrativa, en la etapa preparatoria es preciso también efectuar un análisis preliminar a fin de cerciorarse de que su situación financiera será satisfactoria. Y en el caso de empresas, ya sean nuevas o antiguas, cuya actuación en el pasado ha sido poco satisfactoria, es posible que la preparación del proyecto requiera que se trabaje intensamente con el presunto prestatario a fin de introducir mejoras en la organización y administración de la empresa.

La función del Banco

Oficialmente, la tarea de preparar los proyectos corresponde al prestatario y no al Banco. Este criterio se ha mantenido estrictamente en el pasado por razones fundadas, una de las cuales es el posible conflicto de intereses que se puede suscitar entre la función que el Banco desempeña en la preparación de los proyectos y la que le corresponde en la concesión de préstamos para los mismos. Ese criterio se basaba en que si el Banco mismo hubiese preparado los proyectos, no habría podido luego mantener una actitud objetiva en la evaluación de su propio trabajo. Pero, si bien esta

posición es lógica, los hechos han obligado a modificarla. La experiencia ha demostrado que no se recibe un número suficiente de proyectos bien preparados para que el Banco pueda evaluarlos a menos que éste intervenga muy de cerca en su determinación y preparación. El resultado es que, en vez de que haya una línea divisoria intangible entre la determinación y la preparación de proyectos por una parte, y su evaluación y supervisión por la otra, existe un ciclo continuo en que el Banco se ocupa en detalle de todas las etapas. Uno de los beneficios que se derivan de este cambio de actitud es que, gracias a la mejor preparación de los proyectos, se ha reducido el número de ellos que se rechaza en la etapa de evaluación, aunque a veces la versión definitiva del proyecto puede ser muy distinta de la que se concibió originalmente.

En la práctica, el Banco no efectúa por lo general el trabajo preparatorio porque no dispone del personal suficiente para ello; lo que sí hace es encargarse de que los proyectos se preparen adecuadamente. Esto a su vez se lleva a cabo de diversas formas. Algunos de nuestros prestatarios más importantes y más aptos pueden perfectamente hacerse cargo de preparar sus propios proyectos, sobre todo cuando han tenido experiencia con otros préstamos y conocen los requisitos que el Banco impone y, en efecto, se les anima a que los preparen. Algunas veces, si no cuentan con personal idóneo para tal fin, se mantienen en relación con una firma de consultores que es la que les prepara sus proyectos. En caso de que los prestatarios no cuenten con los servicios de una firma de esa índole, les indicamos la conveniencia de que se pongan en contacto con una de esas firmas para que les ayude a preparar los estudios de factibilidad y, asimismo, la forma de seleccionarlos. Los estudios de factibilidad pueden ser financiados de varias maneras: por el propio prestatario, con fondos de un préstamo o crédito anterior, y a veces también por medio de una donación o crédito de asistencia técnica del Banco; pero, con mayor frecuencia, se financian mediante donaciones del Programa de las Naciones Unidas para el Desarrollo, con respecto al cual el Banco puede actuar como organismo de ejecución. En el caso de la FAO y de la UNESCO, y en el de las misiones del Banco en África, el personal que analiza el proyecto ayuda también a prepararlo, a menos que se requieran estudios especiales.

A menudo existe la idea errónea de que el trabajo que entraña la preparación de un proyecto varía en proporción directa con su magnitud. En realidad no es así, pues los proyectos de poca monta son generalmente de países pequeños, que quizás acaban de independizarse, y el trabajo que su preparación entraña no guarda relación en absoluto con su magnitud. De modo que si de hecho existe alguna relación, ésta es en sentido inverso entre la cantidad de dinero que se

presta para un proyecto y el esfuerzo que se dedica a su determinación y preparación.

EVALUACION

Prosigamos ahora con la siguiente etapa en la evolución de los proyectos, o sea con la correspondiente a la evaluación. Vamos a suponer que el proyecto ha sido ya determinado y preparado debidamente, que se cuenta ya con todos los estudios e informes al respecto y que, en principio, la opinión sobre el mismo es favorable; en pocas palabras, que el proyecto está listo para seguir adelante. La siguiente etapa es la que se denomina evaluación, que quizás sea la fase más conocida, aunque no necesariamente la mejor comprendida, del trabajo relacionado con los proyectos. En los primeros años de existencia del Banco el nombramiento de la misión encargada de la evaluación solía ser el primer contacto directo con el proyecto y con el prestatario, pero actualmente se llega a esta etapa después de un período—que a veces abarca varios años—de estrecha colaboración. No obstante, es una etapa importante del ciclo porque durante la misma se efectúa un examen completo y sistemático de todos los aspectos del proyecto.

Aunque en lo que respecta a la preparación de los proyectos se dependa de los servicios de consultores o de instituciones especializadas, el trabajo de evaluación lo lleva a cabo casi exclusivamente el personal del Banco. Las evaluaciones se efectúan siempre sobre el terreno, pues los estudios que se realizan en la sede del Banco no son suficientes. Las dificultades que presenta la evaluación dependen en alto grado de cómo se haya preparado el proyecto. Si se ha preparado bien, la evaluación puede ser relativamente sencilla; de no ser así, la misión nombrada para fines de evaluación se convierte en realidad en una misión que tiene que ocuparse de preparar el proyecto y, en consecuencia, el Banco tiene que enviar otra u otras misiones para que completen la tarea. La evaluación puede abarcar hasta seis aspectos del proyecto: el técnico, el económico, el comercial, el financiero, el administrativo y el de organización.

Aspecto técnico

En el aspecto *técnico* el Banco debe asegurarse de que se han estudiado de modo adecuado todas las posibles alternativas y que se han hallado las soluciones técnicas correctas. Esto puede entrañar, entre otras cosas, la acertada combinación de semillas, plaguicidas y fertilizantes para un determinado proyecto de cultivo, o un buen sistema de avenamiento para un proyecto de riego; por otra parte, si se trata de un proyecto vial, las cuestiones que hay que resolver pueden ser que el ancho del camino, el borde del mismo y el espesor del pavimento sean apropiados para el volumen del



Una vez terminada la preparación del proyecto de construcción de la carretera hay que ver si realmente responde técnicamente al volumen de tránsito previsto y si el costo de construcción estimado es razonable. Además hay que tener en cuenta el hecho de si diferentes normas de diseño ofrecerían mayores ventajas económicas y si la Dirección de Vialidad está adecuadamente capacitada y cuenta con suficiente personal, equipo y fondos para el mantenimiento de la carretera que se va a construir. Asimismo, hay que prever si los usuarios de la misma van a participar en el costo del proyecto en una proporción razonable a través del pago de impuestos sobre la gasolina u otros derechos. Todas estas consideraciones forman parte del estudio amplio, sistemático, multifacético y, a veces, escéptico, que constituye lo que se denomina EVALUACION del proyecto.

tráfico; si se trata de un proyecto ferroviario, que el trazado sea el mejor posible; si de un proyecto portuario, que los planos de los fondeaderos y la profundidad de dragado correspondan a la clase de buques que atracarán en el puerto; si se trata de un proyecto docente, que el número y distribución de las aulas y laboratorios sea adecuado para el número de alumnos y para las materias que comprende el plan de estudios. Esta lista podría ser interminable. Asimismo, se vuelven a examinar y confirman o revisan en caso necesario todos los aspectos del plan, las estimaciones de costos y los plazos fijados para la ejecución de las obras.

Aspecto económico

Un aspecto importante de la labor que lleva a cabo el grupo encargado de la evaluación es el de asegurarse de que se han encontrado las soluciones técnicas correctas. Esto guarda estrecha relación con el aspecto *económico* de la evaluación. Aunque el Banco ha financiado proyectos tales como una central de energía nuclear, vehículos exóticos de transporte como aliscafos e instalaciones portuarias modernísimas para contenedores, no trata de buscar la solución tecnológica más adelantada, sino la que se ajuste mejor a las circunstancias que presenta el país en desarrollo. A veces esto entraña el reducir el ámbito de planes demasiado

ostentosos que, en realidad, serían como quien dice "elefantes blancos", y transformarlos en proyectos más modestos y realistas que contribuyan al logro del desarrollo del país. A veces sucede lo contrario, y es preciso encontrar la manera de ampliar el aspecto técnico de un proyecto, por ejemplo, mediante la expansión de los mercados para sus productos, a fin de que la solución técnica ofrezca rendimientos adecuados desde el punto de vista económico. La tarea de efectuar el análisis de costos-beneficios de las diversas soluciones técnicas para lograr el mayor rendimiento económico recae en el economista de la misión encargada de la evaluación del proyecto. Con frecuencia sucede que ese análisis se ha hecho ya en etapas sucesivas durante la preparación del proyecto, pero la fase en que se efectúa de modo definitivo el examen y estimación del mismo es la de la evaluación.

Mientras nos referimos al aspecto económico, quizá merezca la pena dedicar un momento a describir la forma en que el Banco considera el proyecto, puesto que esto permite comprender la función del economista. El Banco tiene un concepto muy amplio de lo que se pretende lograr con un proyecto, pero trata de establecer en un momento determinado la mejor armonía entre el proyecto, el sector correspondiente de la economía y el programa de desarrollo del país. En primer término, desea cerciorarse de que los sectores que reciben financiamiento son de suma importancia para el desarrollo económico del país; esto lo logra primordialmente mediante la labor que realizan las misiones económicas que examinan la estrategia global del desarrollo. Luego trata de determinar cuáles son los proyectos de cada uno de los sectores beneficiarios de los préstamos que tienen mayor prelación; esta tarea corresponde a las misiones que efectúan los estudios sectoriales o la selección de los proyectos, y a veces se realiza en las otras formas ya mencionadas.

Cuando llega el momento de evaluar el proyecto, el informe respectivo se ocupa generalmente de la relación que existe entre el proyecto, el sector y la economía. Por ejemplo, en materia de transportes cada uno de esos informes describe el sistema de transportes en su totalidad y la importancia que reviste para el desarrollo económico del país. Si se trata de un proyecto vial, el informe examina su relación con el sistema ferroviario, y viceversa. Al propio tiempo se consideran las políticas de transporte que existen para todo el sector. Si la política pública parece ser contraria al crecimiento del transporte, ya sea por carretera u otros medios, esa circunstancia se explora a fondo en la evaluación y, en el curso de las negociaciones relativas al préstamo, se procura lograr que esa política mejore. En el campo de la educación, de la energía eléctrica y de las telecomunicaciones, el "proyecto", tal como lo define el Banco, puede abarcar el programa de inversiones en la totalidad del sector, pero en todo caso

guarda estrecha relación con el sector; en lo que respecta al sector agrario, el cual es más diversificado y representa una proporción mayor de la actividad económica del país, es más difícil lograr que los proyectos específicos se adapten a una estrategia planeada para todo el sector, pero, con todo, el Banco procura cada vez más lograr esa adaptación.

Aspecto comercial

El tercer aspecto de la evaluación es el *comercial*, y reviste particular importancia para las empresas lucrativas. En ese aspecto están comprendidas todas las disposiciones relativas a las compras y ventas que se hacen en virtud del proyecto. El Banco trata de garantizar que los procedimientos empleados para la adquisición de bienes y servicios necesarios para el proyecto permitan que el prestatario obtenga el máximo rendimiento de sus inversiones; en general, para esto hay que recurrir a la licitación internacional, a la que se hará referencia más adelante. La estimación de las ventajas comerciales entraña también una evaluación tanto de la demanda del mercado en lo que respecta al producto que se va a obtener mediante el proyecto como de la adecuación de los cauces de comercialización y de suministro de materias primas, mano de obra y otros recursos necesarios para el proyecto.

Aspecto financiero

Naturalmente, este aspecto está estrechamente relacionado con el comercial. El estudio que se lleva a cabo cuando se trata de una empresa lucrativa es exhaustivo, y abarca todos los aspectos financieros importantes, pero a los efectos del presente artículo estos pueden dividirse en dos clases. Una de ellas es el interés del Banco en que se cuente con fondos suficientes para la construcción del proyecto. Ni el Banco ni la AIF tienen como norma conceder préstamos por la totalidad de los fondos que se necesitan para un proyecto; a veces los préstamos que otorgan cubren solamente un 10 por ciento o un 20 por ciento del proyecto, y a veces hasta un 70 por ciento o un 80 por ciento, pero nunca el 100 por ciento. Por lo tanto el prestatario tiene que proporcionar una parte de los fondos. En lo que respecta a proyectos de gran envergadura es muy posible que el prestatario no aporte la diferencia, sino que acuda a fuentes de financiamiento tales como las entidades nacionales de los países exportadores de capital. Uno de los aspectos importantes de toda evaluación puede ser el de velar porque exista un plan financiero que permita obtener fondos suficientes para llevar a cabo el proyecto en el plazo previsto. Cuando el prestatario es un gobierno, y se sabe que éste tiene dificultades en recaudar rentas, se pueden proponer arreglos especiales, como por ejemplo la concesión de asignaciones anticipadas o la



Luego hay que averiguar cuánto se necesitará para financiar el proyecto; cuál será el monto y plazo del préstamo bancario; si será necesario contratar consultores para supervisar las obras; y si hay que someter las diferentes partes del proyecto a licitación internacional. Estos son algunos de los puntos que surgen durante la etapa de la evaluación y sobre los cuales se llega a un acuerdo entre el interesado y el Banco en el transcurso de las **NEGOCIACIONES**.

afectación de ingresos tributarios, con el fin de obtener los fondos necesarios dentro del plazo previsto.

La otra cuestión de carácter financiero es la de si la empresa podrá hacer frente a todas sus obligaciones financieras una vez que se halle en funcionamiento. Puesto que lo normal es que el préstamo se otorgue directamente a la empresa que lleva a cabo el proyecto, es natural preocuparse en primer lugar de si podrá satisfacer el pago de su deuda con el Banco. Pero, a su vez, éste se interesa en que el prestatario pueda cumplir todas sus obligaciones financieras, en que disponga de capital de explotación suficiente y en que sus recursos le permitan obtener suficientes fondos

para financiar una proporción razonable de sus necesidades futuras de capital. De ahí que se lleve a cabo un estudio minucioso de la situación financiera de la empresa, y que se efectúen proyecciones basadas en el balance general, en el estado de pérdidas y ganancias y en el flujo de fondos. En los casos en que la contabilidad financiera que lleva el prestatario resulta inadecuada, el Banco puede poner como condición a sus préstamos que se establezca un nuevo sistema contable.

A menudo, en el estudio financiero se subraya la necesidad de reajustar la estructura y, especialmente, el nivel de los precios que cobra la empresa. Los servicios que proporcionan las empresas financiadas por el

Banco, tanto si son de propiedad estatal como privada, son generalmente de primera necesidad y están sujetos a un estricto escrutinio oficial. Como el gobierno desea a veces subvencionar el costo de dichos servicios de utilidad pública, ya sea por razones de política o simplemente por evitar dificultades, es posible que se sienta poco inclinado a aprobar las subidas de precios que se requieren a fin de hacer que la empresa sea financieramente viable. Pero como la viabilidad financiera es una condición *sine qua non* de los préstamos que el Banco otorga a las empresas lucrativas, seguramente el reajuste de las tarifas tiene que ser una cuestión decisiva en la etapa de la evaluación.

Aspecto administrativo

El quinto aspecto que se considera en la evaluación de los proyectos es el *administrativo*, y comprende tanto la capacidad administrativa de los altos funcionarios de la empresa para dirigir la construcción del proyecto, y luego administrarlo, como la idoneidad de todo el personal que trabaja para la empresa u organización. En ciertos países esto presenta grandes problemas. En algunos casos se trata de que hay más personal del que se necesita, como cuando un ferrocarril nacional se ve obligado a reducir sus servicios debido a la competencia que le hace el transporte por carretera, y tiene que preparar un plan para ir reduciendo poco a poco su personal. A veces, es el reverso de la medalla, o sea que la dificultad estriba en que no hay en el país un número de personas suficientemente capacitadas para que ocupen los cargos clave, de modo que es preciso echar mano de personal extranjero hasta que se pueda formar el personal directivo nacional necesario. Una cuestión delicada es la de que debe existir en todo momento cierta proporción entre los consultores y asesores extranjeros, por una parte, y el personal local y la gerencia por la otra. En la actualidad, una cláusula que se incluye normalmente en los préstamos es la referente a las consultas que se deben celebrar entre el prestatario y el Banco acerca de quiénes van a ocupar los más altos cargos en la empresa.

Organización

El sexto aspecto que hay que tener en cuenta es el de la *organización*, o sea la estructura administrativa de la empresa u organismo que lleva a cabo el proyecto. En nuestra opinión, si se trata de una empresa lucrativa que es de propiedad pública, ésta deberá poseer un grado suficiente de autonomía para administrar sus propios asuntos. Debe estar libre de toda intervención política y de la inflexibilidad que a veces caracteriza a las entidades administradas directamente por el Estado. Por tal razón, aunque el grado de autonomía es una cuestión de peso en el examen que realiza el funcionario que se ocupa de la organización de la empresa, el Banco presta atención también a

otros aspectos, ya que desea percatarse de si se realiza con eficiencia todo lo que concierne a la estructura interna, del orden jerárquico-administrativo, de la organización de los departamentos, del modo en que se ejecutan las decisiones y de la asignación de funciones dentro de la organización.

Todos estos aspectos revisten interés no solamente en lo que respecta a las empresas lucrativas, sino también a toda entidad beneficiaria de los préstamos que se conceden. Por ejemplo, la reorganización del departamento vial ha sido uno de los aspectos que ha formado parte de varios préstamos o créditos otorgados para la construcción de carreteras. En los créditos agrícolas, por ejemplo para un proyecto ganadero, la norma cada vez más corriente es que se lleve a cabo la reforma de las instituciones existentes, o que se establezcan otras nuevas.

Estas son algunas de las cuestiones principales que se plantean durante el proceso de evaluación. De ahí que la mejora de los procedimientos y técnicas de evaluación sea una tarea continua. Para poder decidir entre las posibles alternativas se ha empleado el análisis de sistemas. En el estudio relacionado con los costos-beneficios se está usando cada vez más el análisis de riesgos y de probabilidades a fin de tratar de eliminar el elemento de incertidumbre inherente a muchas de las estimaciones de los proyectos. Cuando los costos económicos no se pueden percibir con exactitud basándose en los precios del mercado, se aplican los precios de cuenta o "de sombra". El Banco trata asimismo de mantenerse al día en materia de adelantos tecnológicos, y se cuida de que se pongan en práctica tan pronto como las circunstancias lo permitan. De modo que, con el transcurso del tiempo, conforme ha ido avanzando la tecnología, ha venido también evolucionando el alcance y los elementos relacionados con el proceso de evaluación.

Hemos descrito cómo se seleccionan, preparan y evalúan los proyectos sobre el terreno. Luego, a su regreso, la misión que se encarga de la evaluación del proyecto redacta un informe del cual se efectúa en el Banco un examen cuidadoso y exhaustivo, y cuando el proyecto recibe aprobación se comunica a los que se ocupan de las negociaciones.

NEGOCIACIONES

Las negociaciones constituyen la etapa en que el Banco y el prestatario tratan de llegar a un acuerdo sobre las diversas medidas que aconseja el informe de evaluación a fin de garantizar el éxito del proyecto; estos acuerdos se transforman luego en obligaciones jurídicas que se estipulan en los documentos de préstamo. A guisa de ejemplo: supongamos que los ingresos de una empresa que suministra energía son insuficientes debido a que las tarifas respectivas se han



Una vez aprobado y firmado el préstamo bancario es preciso someter a licitación las obras de construcción de la carretera y adjudicar los contratos a la firma que ofrezca más ventajas. Es inútil que la planificación se lleve a cabo cuidadosamente si los contratistas y consultores no efectúan sus tareas con toda exactitud en cada fase del proyecto, si no se organiza debidamente el programa de mantenimiento oportuno de la carretera y si no se facilitan suficientes fondos locales. El préstamo incluye fondos para estudios de viabilidad de nuevos ramales de carretera que conecten la carretera principal con las zonas agrícolas subdesarrolladas, con lo cual se prepara el terreno para la gestión de un nuevo ciclo del proyecto. La tarea de velar por el cumplimiento de estos requisitos a fin de lograr los objetivos de desarrollo que se espera alcanzar mediante la carretera, constituye la etapa de SUPERVISION.

fijado a un nivel antieconómico o que se ha convenido con el prestatario que a fin de que la empresa obtenga una tasa de rendimiento adecuada y pueda financiar una proporción razonable de sus nuevas inversiones es preciso subir las tarifas, digamos en un 20 por ciento inmediatamente y en un 10 por ciento dentro de dos años. En este caso, durante las negociaciones se lleva a cabo un acuerdo financiero que define los objetivos financieros generales de la empresa de servicios públicos; en él se especifica la tasa de rendimiento necesaria y el momento que se considera oportuno para subir las tarifas. En los documentos referentes al préstamo se detallan los aspectos administrativos, de

organización y comerciales; en realidad, en esos documentos se tienen en cuenta todos los problemas que han surgido antes de la etapa de evaluación y durante el transcurso de la misma. Por ejemplo, si se llega a la conclusión de que un camino debe ser de grava en vez de pavimentado o asfaltado, esto se estipula en la descripción del proyecto. Si es necesario contratar los servicios de consultores en relación con alguna parte del proyecto, el prestatario se compromete a contratar y a mantener consultores que el Banco considere satisfactorios. En consecuencia, las negociaciones y la redacción de los documentos legales constituyen una parte esencial del proceso de garantizar que las conclu-

siones alcanzadas durante la evaluación se traduzcan en medidas convenidas con el prestatario y que se pongan en práctica en fechas aceptables.

Después de celebradas las negociaciones, se actualiza el informe de evaluación para que refleje los acuerdos alcanzados durante dichas negociaciones y tanto la versión revisada del informe como los documentos conexos se someten a los Directores Ejecutivos del Banco. Si ellos aprueban la operación, se firma entonces el contrato de préstamo o de crédito en una sencilla ceremonia que señala la terminación de una etapa del ciclo y el comienzo de otra.

SUPERVISION

La última etapa del ciclo de cada proyecto es la de su supervisión durante el período de construcción y ulterior funcionamiento. La supervisión tiene por objeto cerciorarse de que el proyecto se está ejecutando conforme se planeó o de que se va modificando según las circunstancias que se presenten a fin de lograr los objetivos de desarrollo que se tenían en mira.

La tarea de supervisión es la que menos incentivo ofrece entre las que se realizan en relación con los proyectos. Una vez que se ha celebrado el acto correspondiente a la firma de un préstamo o crédito, la atención de los planificadores y de los que formulan la política se dirige hacia la ejecución de nuevos proyectos; esta actitud es comprensible y se ve reforzada por el hecho de que es posible que transcurran muchos meses antes de que el "antiguo" proyecto comience a rendir resultados tangibles. No obstante, la supervisión es una etapa esencial. Es evidente que por bien que se haya determinado, preparado, evaluado y negociado un proyecto, los beneficios del desarrollo se perciben únicamente cuando su ejecución se lleva a cabo de manera adecuada. Además, como el desarrollo es por definición un proceso dinámico, es posible que las circunstancias en que el proyecto se pone en práctica no coincidan en todos sus aspectos con las previstas en la etapa de la evaluación. Por lo tanto, una parte importante del proceso de supervisión quizá sea la adaptación del proyecto a las circunstancias que se presentan, y en este sentido el término "supervisión" es inapropiado pues no hace justicia a la labor que realmente se lleva a cabo. Estas son las razones por las que hemos llegado a la conclusión de que es preciso prestar atención preferentísima a la asignación del personal del proyecto.

Al igual que sucede con todas las demás etapas, la de supervisión de los proyectos tiene lugar de modos diversos. Durante el curso de las negociaciones se llega a un acuerdo sobre las fechas en que el prestatario habrá de preparar los informes sobre la marcha de las obras; esos informes contendrán datos sobre la ejecución del proyecto y sus costos y, si se trata de una empresa lucrativa, sobre la situación financiera del pres-

tatario. Por lo general, dichos informes se presentan a intervalos de tres a seis meses, y pueden ser preparados por el prestatario o por sus consultores. El examen de estos informes lo efectúan en Washington los mismos funcionarios del Banco que se ocuparon de las etapas anteriores del proyecto y, si ellos ven que ha surgido algún problema, éste se resuelve en primer lugar por correspondencia.

Una característica importante de la supervisión de proyectos se refiere a la adquisición de los bienes y servicios que se financian por medio del préstamo o crédito. Una de las funciones principales del Banco es la de velar por que esta adquisición se lleve a cabo de acuerdo con las directrices que se han establecido para tal fin, y que se publican en un folleto que se distribuye ampliamente. Estas directrices tienen por finalidad asegurar que los contratos para la ejecución de las obras y para la adquisición del equipo permitan el máximo ahorro posible. El método que se ha venido empleando para ese fin desde hace mucho tiempo es el de someter los contratos o las compras a licitación internacional entre contratistas o fabricantes idóneos. La lista de directrices contiene normas detalladas sobre cómo habrá de llevarse a cabo la licitación. Los funcionarios del Banco atribuyen gran importancia y dedican mucho tiempo a la tarea de velar por que esas normas se pongan en práctica, y cabe hacer alusión al hecho de que un solo préstamo o crédito puede entrañar la celebración de hasta varios cientos de contratos que quizá tengan que examinar en su totalidad esos funcionarios. A veces esa tarea es relativamente sencilla y rutinaria, pero en otros casos el trabajo es mucho más complejo, por ejemplo, cuando se trata de proyectos de telecomunicaciones o de energía eléctrica en que el monto de los pedidos asciende a US\$5 millones, US\$10 millones ó US\$15 millones; en ocasiones se torna difícil adjudicar los contratos debido a que las diferencias que surgen entre unos y otros como consecuencia de la evaluación son mínimas. Conviene aclarar que es al prestatario, y no al Banco, a quien corresponde la tarea de evaluar las ofertas que se presentan. El cometido del Banco en este aspecto consiste en examinar el trabajo que realiza el prestatario para asegurarse de que está todo en regla. Antes de que se pueda adjudicar el contrato es preciso que el prestatario cuente con la aprobación del Banco, el cual se percata pronto de cualquier controversia que haya surgido.

Las tareas que se acaban de describir son las que se ejecutan primordialmente en la sede del Banco, pero éste también envía misiones al país beneficiario del préstamo a supervisar la marcha de los trabajos y a enterarse de las dificultades que pudiera haber presentado su ejecución. La frecuencia de estas visitas varía según la naturaleza del proyecto. Por lo general cuando se trata de proyectos que están en plena marcha se envía una misión cada nueve meses para que supervise

los trabajos. Sin embargo, nos gustaría hacerlo con mayor frecuencia y estamos ya adoptando medidas con ese fin. Lo ideal sería que fueran anualmente algunas misiones más, pues esto nos brindaría la oportunidad de trabajar en contacto más estrecho con nuestros prestatarios para combatir los problemas más fácilmente y comprobar si el proyecto está avanzando con la debida rapidez, y si se están logrando los mejores resultados. En la supervisión periódica que se efectúa, a algunos proyectos (que en la actualidad constituyen alrededor del 10 por ciento del total) se les clasifica como "problemas"; a estos proyectos se les presta especial atención, y son objeto de visitas más frecuentes.

La supervisión es un proceso en el que se aprende a fuerza de práctica. La experiencia que se adquiere sirve no solamente para efectuar las modificaciones necesarias a los proyectos que ya están en marcha, sino también para formular en el futuro proyectos parecidos. En el curso de los trabajos de supervisión, se evalúan constantemente los resultados de los proyectos financiados por el Banco. En nuestra opinión, esto no reemplaza al detenido estudio que se realiza de dichos proyectos cuando ya han estado funcionando un número suficiente de años a fin de comparar los resultados prácticos con los que se tenían en mira originalmente. El Banco ha terminado ya, o tiene en marcha, varios de esos estudios y tiene intención de realizar otros periódicamente. Los funcionarios del Banco han trabajado también en colaboración con varios grupos ajenos al mismo que han efectuado estudios independientes de tales proyectos.

Entre otras tareas, las misiones encargadas de la supervisión se ocupan de examinar los estudios preparatorios de proyectos futuros previstos ya en un préstamo o crédito (a los que anteriormente llamamos proyectos concatenados). También mantienen al Banco en contacto continuo con sus prestatarios, lo cual da luego origen a nuevos proyectos que hay que seleccionar y poner en marcha. De este modo, la supervisión conduce a las etapas de selección y preparación, iniciándose así un nuevo ciclo para un nuevo proyecto.

Hemos visto que, a fin de contribuir a preparar y ejecutar los proyectos que habrán de contribuir al desarrollo, el Banco tiene que intervenir en el proceso de evolución del proyecto en una etapa lo más temprana posible del ciclo y mantener su intervención de modo continuo.

Pese a las discrepancias que inevitablemente surgen a veces cuando se necesita tomar una decisión sobre algún asunto importante, las relaciones que como resultado de este proceso continuo han surgido entre el Banco y la mayoría de sus prestatarios han llegado a ser muy buenas. Los prestatarios han podido percatarse de que el Banco no obra por interés propio, sino que tiene en mira contribuir al desarrollo de los países mediante los préstamos que concede para la realización de proyectos bien concebidos y ejecutados, y que, en suma, este es su interés primordial y, en efecto, lo único que persigue con los trabajos relativos a los proyectos.

RECAPITULACION

- El número relativamente reducido, aunque cada vez mayor, de operaciones de que el Banco se ocupa cada año;
- la gran variedad de proyectos para los que se otorgan préstamos o créditos;
- la diversidad de fases por las que éstos atraviesan hasta que llegan a formar parte de la cartera de proyectos, y la evolución de estos últimos;
- el amplio alcance de los asuntos que revisten interés para el Banco y que abarcan el programa de desarrollo, el sector y la empresa respectiva;
- la importancia de la supervisión de los proyectos;
- y, en particular, la estrecha asociación que se establece entre el Banco, el gobierno y el prestatario en todas las etapas del ciclo del proyecto.



Warren C. Baum, ciudadano de Estados Unidos, ha trabajado en el Banco Mundial desde 1959. Antes de ser nombrado Jefe de la que era entonces División de Transportes del Departamento de Proyectos había sido economista y funcionario encargado de préstamos en el Departamento Europeo. Luego ocupó el cargo de Director Adjunto de ese Departamento y, en el momento actual, es Subdirector de Proyectos. Cursó sus estudios en la Universidad de Columbia y en la de Harvard, en la que en 1949 obtuvo el doctorado en Economía. Warren C. Baum es autor de la obra *The French Economy and the State* y de varios artículos.



The Project Cycle

by Warren C. Baum

Reprinted from
Finance and Development

June 1970

Finance and Development is published quarterly in English, French, and Spanish by the International Monetary Fund and the International Bank for Reconstruction and Development, Washington, D.C., 20431, U.S.A.

A quarterly German language edition is published in Germany by the Fund and the Bank in collaboration with the Kreditanstalt für Wiederaufbau and is produced by the HWWA—Institut für Wirtschaftsforschung-Hamburg.

A selection of *Finance and Development* contents is published annually in Rio de Janeiro, Brazil, in cooperation with the United Nations Information Center.

Opinions expressed in articles and other material are those of the writer or writers; they are not statements of Fund or Bank policy.

The contents of *Finance and Development* may be quoted or reproduced without further permission. Due acknowledgment is requested.

Finance and Development is issued and sent free of charge. Names may be added to the mailing list on application to

Finance and Development
International Monetary Fund Building
19th and H Streets, N.W.
Washington, D.C. 20431
U.S.A.

The Project Cycle

In this article—one of the most important ever to appear in Finance and Development—the Associate Director, Projects, of the World Bank sets out in nontechnical language just how the Bank carries out its most characteristic activity: the identification, preparation, appraisal, and supervision of projects for economic development.

Warren C. Baum

IF THE QUESTION: "What does the World Bank do?" had to be answered in a few words, these words might be: "It lends for development projects." The financing of specific projects, carefully selected and prepared, thoroughly appraised, and closely supervised, is the Bank's central business. The Bank, and beginning in 1961 its soft-loan affiliate, the International Development Association (IDA), have since their inception made some 950 loans and credits¹ for a total amount of about US\$17 billion. Of these the overwhelming majority have been for specific projects such as schools, irrigation dams, power plants, and roads. In the fiscal year 1969, for example, 111 loans and credits (a record number) were signed, all but one of which were for individual projects. This emphasis on project lending derives from the Articles of Agree-

ment of the Bank, which provide that loans made by the Bank shall, except in special circumstances, be for the purpose of specific projects of reconstruction or development.

Project lending is intended to ensure that Bank funds are invested in sound, productive projects with the purposes of contributing both to the borrowing country's capacity to repay and to the development of its economy. It is in the coincidence of these two purposes that the Bank's functions as an international financial institution merge with those that it has increasingly assumed as a development institution.

Even with the record amount of lending recently achieved, and the even larger amounts expected in the future, the Bank and IDA are and will be dealing with a relatively small number of project operations. These projects, characteristically, are large, usually costing in the millions of dollars. They are diverse, ranging from oil palm plantations in Papua/New Guinea to the construction of Japan's high-speed Tokaido railway line.

¹ Loans are made by the Bank at an annual interest rate which is currently 7 per cent; IDA offers credits on concessionary terms of 50 years with a service charge of $\frac{3}{4}$ per cent a year. The methods of project work are identical for the two institutions, and in this article all references to the Bank and to loans apply equally to IDA and to credits.



An all-weather transportation link between the country's agricultural region and the coast has been established as a high priority objective for its economic development. How to fulfill it? Should the existing earth road be improved? Or a new road built on a different itinerary? Is a railroad feasible? Among these possibilities there is a development project demanding IDENTIFICATION.

No two projects are alike; each has its own particular history, and project lending has to be tailor-made to fit each one of them. Techniques and procedures of project lending are continually being re-examined and revised in a quest for excellence which is the challenge and reward of project work.

This work, as it is carried out in the Bank, is a continuous and self-sustaining cycle of activity, which runs through four principal stages. The first is identification of the project; the second its preparation, once identified, to the stage where it is ready for appraisal; the third is appraisal of the project and, assuming the appraisal is affirmative, the negotiation and signature of a loan for it; and the fourth is the supervision of the

project in its construction and operating stages to make sure it achieves its objectives.

The reason that we consider this a cycle is that each stage not only grows out of the preceding ones, but leads into the subsequent ones, and we try to make it a self-renewing cycle so that new projects grow out of old ones in a continuous process.

IDENTIFICATION

The logical place to start is with identification. This is the process of identifying, in a preliminary way, projects which are of high priority, which might be suitable for Bank financing, and which the borrower,

the Bank, and the government are interested in considering. There are essentially three tests involved in the identification of a project. The first is whether the sector of the economy into which the project falls, and the project itself, are of high priority for development and are so recognized in the government's development plans. The second is whether, on prima facie grounds, the project seems to be feasible; that is, whether a technical solution to the problem to which the project is addressed can be found at a cost commensurate with the benefits to be expected. And the third test is whether the government is willing to support the project by financial and other means. This is because loans are made either to governments or government entities, or to private entities with the support and guarantee of the government.

How do we go about identifying projects? The answer is not a simple one. Just as there is a wide diversity of projects for which we lend, there is also a wide variety of ways in which projects come to the attention of the Bank, are identified, and are brought forward.

The most straightforward way of getting a new project is by a repeater loan to the same borrower, for subsequent stages of development of the same or a similar project. The Bank is now more than 20 years old and, as might be expected, we are repeating operations with a number of our borrowers. This is particularly so in the older fields of lending such as power and transportation. To give some outstanding examples, we have made ten loans and credits to the Indian Railways, to finance successive annual or biannual segments of their investment program. We have made seven loans to the Comisión Federal de Electricidad for various stages of expansion of the Mexican power system. So, a principal source of new projects is our continuing relations with borrowers, with new projects being identified and growing out of the supervision of existing projects.

I do not want to leave the impression that these repeater loans, because they are easy to identify, are necessarily easy to prepare and negotiate. Sometimes this is so, and if the first project is going well, the second can be relatively straightforward. But sometimes the reverse is true. The first loan must be made somewhat on faith, with limited knowledge of the borrowing entity which may be a new institution established as part of the project, or with which we are just beginning to get acquainted. Various objectives are agreed upon and commitments entered into, but the project may not develop as hoped or expected. When this happens it may take three, four, or even five years to make the second loan because the problems which arose under the first have to be straightened out and we must be reasonably satisfied with performance

under it before we are prepared to make another one. So, while some of the repeater loans are easy, some are very difficult.

"Piggyback" Operations

There is a variant of the repeater loan, bearing the inelegant but descriptive title, which it acquired from the railway transportation field, of the "piggyback" operation. An important way of securing a self-sustaining project cycle is to include in a loan for a given project the funds for feasibility studies or for detailed engineering of subsequent projects. If, for instance, the Bank is financing the construction of a dam as the first stage of expansion of a power system, the loan may well include the studies necessary to identify and prepare the succeeding stages of the power program.

Missions

There are other ways in which projects are identified. The Bank sometimes sends a special mission to a country, to look into sectors in which we have not done business before. A team of specialists is sent on a preliminary reconnaissance of the sector to determine whether worthwhile projects can be identified. In agriculture and education we have formal relationships with other specialized agencies of the United Nations, which cover the identification and preparation of projects. In agriculture, the agreement is with the Food and Agriculture Organization (FAO), under which it staffs missions that perform identification work for the Bank and that also help to prepare those projects that have been identified. There is a large separate staff in the FAO working full time for the Bank on the identification and preparation of projects, with costs shared between the two institutions. The United Nations Educational, Scientific and Cultural Organization (UNESCO) performs similar services for the Bank in the field of education.

An indication of the importance that the Bank attaches to project identification may be seen in Africa, which is the newest area of the world in terms of Bank lending. Missions have been established in East and West Africa, with headquarters in Nairobi and Abidjan, respectively; between them all of Africa south of the Sahara is covered. The terms of reference of these missions are to help identify and prepare projects for Bank and IDA lending. They have succeeded in filling the pipelines with projects that are now reaching the lending stage in significant numbers.

Another important way of identifying projects is through the work of economic missions. The Bank periodically sends economic missions to its developing member countries for a variety of purposes, one of which is to review the major sectors of the economy in



An improved road is decided on. What should be the precise alignment? Should it have an asphalt or gravel surface? How many lanes, how wide the shoulders, and to what standards of bridge design? What is the trade-off between construction and maintenance costs? A multitude of decisions—technical, economic, financial—make up project **PREPARATION**.

order to establish development priorities and to identify projects which might be suitable for lending.

Other Means

Finally, there are some projects which are identified without our help. These are usually brought forward by new borrowers interested in having Bank assistance, or by private business organizations. When, for example, an international steel or aluminum company is considering an investment to develop mineral resources in Africa, it may seek the Bank's involvement to obtain both additional capital and the security which

the Bank's presence provides, and it will take the initiative in bringing such projects to our attention.

Usually, however, the work of the identification has to be done by the Bank itself. With the higher lending goals which Mr. McNamara has set forth, identification is becoming increasingly important as a means of filling the pipeline with projects for which loans may be made in succeeding years.

PREPARATION

Once a project has been identified, it enters what we call the project pipeline, and an extensive period of

close collaboration between the Bank and the eventual borrower begins. This phase of the project cycle, because it depends so much on the nature of the project, the past experience of the borrower, the relationship of the Bank with the country and the borrower, and many other factors, is the most difficult to characterize. Again I should like to stress the diversity of projects and the fact that each has its own particular history.

Preparation covers all the steps necessary to bring a project to the point where its technical, economic, and financial feasibilities have been established and it is ready for appraisal. For a repeater loan where the first project has gone well, the time can be as brief as a few months. At the other extreme, where we have had great difficulties with the borrower in identifying and helping to prepare a satisfactory project, or where we cannot lend to the country for other reasons (for example, until it has improved the management of its economy), preparation may take five years or more. Some projects fall out during the process, and a loan or credit is never made.

The time consumed in the preparation process is a common source of complaint by governments in the developing countries which have an understandable desire to short-circuit project preparation and move directly from the stage of identification to the making of a loan. But the projects characteristically involve long-lived investments, and the time spent in ensuring that correct technical solutions have been found, in setting up the proper organization, in anticipating and dealing in advance with marketing and other problems, usually pays for itself many times over.

Preparation of a project involves decisions, based on technical judgments, about the site and location of the facility, and more broadly, on the appropriate technical features of the project itself. This is the stage in which soil, hydrographic, and hydrological investigations have to be undertaken, and the suitability and adequacy of the natural and other resources required for the project determined. It is also the stage where alternatives are systematically explored. If, for example, a borrower approaches us with a proposal to build a large dam for hydroelectric power, one of the first questions to be asked is whether a thermal plant could provide equivalent power at a lower cost. Or the proposed project may be for the construction of a four-lane, asphalt highway, while a two-lane gravel road, improved in stages with the subsequent build-up of traffic, might in fact provide much higher returns. A new irrigation project has to be considered against the alternatives of improving existing irrigation facilities or of developing agriculture through less capital-intensive measures in rain-fed areas of the country. If the school buildings in an education project appear excessively ambitious, less

elaborate structures might save funds that could be used for investments elsewhere in the education system. At the preparatory stage it is therefore essential that all the alternative ways of accomplishing the objectives be considered. This is done typically through feasibility studies, which provide the preliminary design and engineering of alternative technical solutions and make a preliminary assessment of the economic benefits of each.

For a revenue-earning enterprise, the preparatory stage also includes a preliminary analysis to make sure that its financial position will be satisfactory. And for new enterprises or old ones whose past performance has been inadequate, project preparation may entail a great deal of work with the prospective borrower to bring about improvements in organization and management.

The Bank's Role

The formal responsibility for preparing projects is that of the borrower and not that of the Bank. This formal position was rigidly adhered to in the past for good reasons, one of which is the potential conflict of interest between the roles of the Bank in preparing projects and in lending for them. It was felt that if we had prepared a project, we could not be objective later in the appraisal of our own work. While the position is logical, it has not been able to withstand the pressure of events. Experience has demonstrated that we do not get enough good projects to appraise unless we are involved intimately in their identification and preparation. The result is that, instead of having an invisible dividing line, with identification and preparation of projects on one side and appraisal and supervision on the other, there is a continuing cycle in which the Bank is closely engaged at all stages. One of the benefits of this change of attitude is that, through better preparation, fewer projects are rejected at the appraisal stage, although the final version of the project may be quite different from its original conception.

In practice, the Bank does not usually do the preparatory work itself because we do not have the staff for it; what we do now undertake is the responsibility of ensuring that projects are adequately prepared. This again entails a variety of means. Some of our larger or more sophisticated borrowers are quite capable of preparing their own projects, particularly after the first or second loans when they have become accustomed to the Bank's requirements, and they are encouraged to do so. If they do not have adequate staff for the purpose, they may have a regular relationship with a consulting firm which prepares projects for them. If such a relationship does not exist we may urge the entity to get consultants to help prepare the feasibility studies,



The road project has been prepared. Has the correct technical solution been found for the expected traffic and is the construction cost estimate reasonable? Would different design standards yield a higher economic return? Does the Government's Highway Department have a suitable organization to maintain the road after it is built, as well as sufficient staff, equipment and funds? Will road users contribute a reasonable share of the project's costs through gasoline and other taxes? Comprehensive, systematic, many-sided, often skeptical examination is the essence of a project's field **APPRAISAL**.

and guide it in how to go about the selection. The feasibility studies may be financed in various ways: by the borrower itself; out of the proceeds of an existing loan or credit ("piggyback"); occasionally by a Bank technical assistance grant or credit; or more frequently by a grant from the United Nations Development Program, for which the Bank may act as Executing Agent. In the case of FAO and UNESCO, and of the Bank's African missions, the staff which identifies the project also helps to prepare it, unless specialized studies are required.

There is a common misconception that the amount of work it takes to prepare a project varies directly

with its size. Small projects tend to be located in small countries, perhaps newly independent, and the work involved in preparing these projects is entirely out of proportion to their size. So, if anything, there is an inverse relationship between the amount of money we lend for a project, and the effort expended in identifying and preparing it.

APPRAISAL

Let us move on in the project cycle to the next stage, that of appraisal. We will assume that the project has been identified, that it has been well prepared,

the studies and reports are complete, and the preliminary indications are favorable—in short, that the project is ready to go forward. The next step is what we call appraisal. Appraisal is perhaps the best known, but not necessarily the best understood, part of project work. In the early days of the Bank the appraisal mission might be our first contact with the project and the borrower, but now it usually comes at the end of a period—perhaps as long as several years—of close association. Nevertheless, it is an important stage in the cycle because it is a comprehensive and systematic review of all aspects of the project.

While consultants or specialized institutions are relied on to help prepare projects, the appraisal work is conducted almost exclusively by Bank staff. The appraisals are always made in the field; desk studies alone are not enough. How difficult the appraisal will be depends very much on how the project has been prepared. If the preparation has been well done, the appraisal can be relatively straightforward; if not, what was thought to be an appraisal mission then becomes in fact a project preparation mission, and a subsequent mission or missions may be necessary to complete the job. The appraisal can cover up to six aspects of a project: the technical, economic, commercial, financial, managerial, and organizational.

Technical

On the *technical* side, we have to be sure that the alternatives have been adequately considered and the correct technical solutions found. This means the right combination of seeds, pesticides, and fertilizer for a particular crop-growing project, or the correct system of drainage for an irrigation project; if it is a road project, that the width of the road, the shoulders, and the thickness of the pavement are appropriate to the traffic; if a railroad construction project, that the best alignment has been found; if a port project, that the design of the berths and the depth of dredging are correct for the kinds of vessels serving the port; if an education project that the number and layout of classrooms and laboratories are suitable for the proposed input of students and the curriculum envisaged. The list could be extended indefinitely. All features of the project design, the cost estimates, and the construction schedule are re-examined and confirmed or revised as necessary.

Economic

Ensuring that the right technical solutions have been found is a major focus of the work of the appraisal team. It ties in very closely with the *economic* dimension of the appraisal. While the Bank has financed a nuclear power plant, exotic transport vehicles such as

hydrofoils, and the most modern container port facilities, we are not looking for the most advanced technological solution but for the one which best fits the circumstances of the developing country. This sometimes involves scaling down ambitious schemes that would be white elephants into more realistic and modest projects that would better serve the development of the country. Sometimes the reverse is true, and ways have to be found of enlarging the technical dimensions of a project, as, for example, by developing additional markets for its products, before the technical solution yields an adequate economic return. The cost-benefit analysis of different technical solutions to arrive at the one which gives the highest economic return is the responsibility of the economist on the appraisal mission. The analysis will often have been done in successive stages during project preparation, but the appraisal is the point where the final review and assessment are made.

While referring to the economic dimension, it might be worth taking a moment to describe how we view a project, since it helps to understand the role of the economist. The Bank takes a broad view of what a project is intended to be. We try to get the best relationship, at a particular moment of time, between the project, the sector of the economy into which it fits, and the development program of the country. First, we want to know that the sectors in which we are lending are of high priority to the economic development of the country; this is done primarily through the work of the economic missions which review the over-all development strategy. Then we try to determine that, within each of the sectors of lending, the projects we are financing are of high priority; this determination is made by the sector studies or project identification missions or in the other ways that I have mentioned.

When it comes to the appraisal of the project, the appraisal report generally discusses the relationship between the project, the sector, and the economy. In transportation, for example, each appraisal report describes the transportation system as a whole and its importance to the country's economic development. If it is a highway project, the report will examine its relationship to the railway system, and vice versa. At the same time, we review transportation policies throughout the sector. If there appear to be public policies which are inimical to the growth of transportation, whether in highways or elsewhere, these will be explored at length in the appraisal and we will attempt in the negotiation of the loan to get improvements in these policies. In education, power, and telecommunication, the "project" as defined by the Bank may embrace the investment program of the whole sector, and in any case is closely related to the sector; in agriculture, which is more diversified and accounts for a much larger share of the country's economic activity, it is more difficult to fit individual projects into a strategy



What financing is necessary for the project? How large should the Bank loan be, and for how long? Will consultants be necessary to supervise construction? Will all parts of the project go out for international tender? Agreement between the borrower and the Bank on these and the other issues raised during the appraisal is reached during **NEGOTIATIONS**.

for the sector as a whole, but we are attempting to do so to an increasing extent.

Commercial

The third dimension of the appraisal is the *commercial*, which is of particular importance to revenue-earning enterprises. Commercial considerations cover all arrangements for buying and selling under the project. The Bank seeks to ensure that the procedures used to procure the goods and services required for the project will give the borrower the best value for its money; in general, this implies the use of international competitive bidding, which I shall refer to again later. The

commercial appraisal also includes an evaluation of the market demand for the output of the project, the adequacy of marketing channels, and the supply of raw materials, labor, and other resources required for the project.

Financial

The *financial* dimension is, of course, closely related to the commercial. The review of a revenue-earning enterprise is very comprehensive, covering all the significant financial aspects; but for purposes of discussion these can be separated into two issues. One is our concern that there be sufficient funds for the construction

of the project. It is not the practice of the Bank or IDA to lend all the money that is required for a project; we may lend as little as 10 per cent or 20 per cent, or as much as 70 per cent or 80 per cent, but never 100 per cent.

The borrower must therefore provide part of the funds. In large projects, the borrower may not put up all of the remainder itself, but may go to other sources of finance such as the national agencies of capital-exporting countries. An important aspect of the appraisal may be to ensure that there is a financing plan which will make sufficient funds available to construct the project on schedule. When the borrower is a government that is known to have difficulty in raising local revenues, special arrangements may be proposed, such as advance appropriations or the earmarking of tax proceeds, to secure the necessary funds on time.

The other financial issue is whether the enterprise will be able to meet all its financial obligations when it is in operation. Since we typically lend directly to the enterprise that is carrying out the project, we are naturally concerned in the first instance that it be able to service its debt to the Bank. But we are also concerned that it be able to meet all its financial obligations, that it have adequate working capital, and that it generate enough funds from its internal resources to finance a reasonable proportion of its future capital requirements. So a detailed review is made of the finances of the enterprise, with projections of the balance sheet, the income statement, and the cash flow. Where the existing financial accounts are inadequate, a new accounting system may have to be established as a condition of Bank lending.

The financial review often highlights the need to adjust the structure, and particularly the level, of prices charged by the enterprise. Whether or not they are publicly owned, the enterprises financed by the Bank generally provide basic services and come under close public scrutiny. Because it may wish to subsidize the cost of such services to the consuming public as a matter of policy, or at times perhaps simply as the line of least resistance, the government may be reluctant to approve the increases in prices necessary to make the enterprise financially viable. But financial viability is a *sine qua non* of Bank lending to revenue-earning enterprises, and the question of rate adjustments may prove to be critical to the appraisal.

Managerial

The fifth dimension of project appraisal is the *managerial* one. Here we are concerned both with the adequacy of the top management to direct the construction of the project and manage it thereafter, and also with the adequacy of the staffing at all levels of the enterprise or organization. In some countries this becomes a

major concern. At times the issue is one of redundant staff, as when a national railway is forced to cut back its services in the face of road competition, and has to work out a schedule for orderly reductions in staff. At times there is an opposite concern that the local staff is insufficient, either in number or in quality, to fill key positions in the hierarchy, so that external assistance has to be provided until local managers can be trained. The proper balance at any particular time between the use of consultants and foreign advisors on the one hand, and of local staff and management on the other, is a delicate one. Consultation between the borrower and the Bank on key managerial appointments is now a standard loan provision.

Organizational

The last of the six dimensions, the *organizational* one, is concerned with the administrative structure of the enterprise or agency carrying out the project. A revenue-earning enterprise that is publicly owned should, in our view, have an adequate degree of autonomy to administer its affairs. It should be free from political interference and from the rigidity that is sometimes inherent in agencies administered directly by the government. So while the degree of autonomy is a principal question examined by the staff member concerned with organization, our interest goes beyond this to make sure that the whole internal structure, the chain of command, the way in which departments are organized, the flow of decisions, the allocation of responsibilities within the organization are reasonably efficient.

This broader concern applies not only to revenue-earning enterprises, but to any organization to which we lend. Thus, a reorganization of the highway department has been part of a number of loans or credits for the construction of highways. In our agricultural lending, the reform of existing institutions, or the establishment of new ones, for example to carry out a livestock project, is increasingly the rule.

These are some of the principal types of issues that arise in the appraisal process. We are continually trying to improve our appraisal procedures and techniques. Systems analysis has been introduced into the choice of alternatives. Risk and probability analysis are increasingly employed in the cost-benefit work, to deal with the uncertainty attached to many of the project estimates. Shadow prices are being applied where true economic costs are not accurately reflected in market prices. We also try to keep abreast of new technology and new techniques to see that they are brought into use as rapidly as circumstances warrant. The scope and content of the appraisal process are thus evolving over time, against the background of related developments in technology, economics, and finance.



The Bank loan has been approved and signed. The road works must be put out to tender, and awarded to the lowest evaluated bidder. All the careful planning will be useless if contractors and consultants do not carry through at every stage, if highway maintenance is not reorganized on schedule, and adequate local funds provided. The loan includes funds for feasibility studies of new feeder roads to link the road to an underdeveloped agriculture area, thus preparing the way for another project cycle. Watching over these and other matters to ensure that the development objectives of the road are realized makes up the task of SUPERVISION.

We have described how projects are identified, prepared, and appraised in the field. The appraisal mission returns, it writes its report, and the report is carefully reviewed, and reviewed again within the Bank. When it has finally been approved negotiators are invited.

NEGOTIATIONS

Negotiations are the stage at which the Bank and the borrower endeavor to agree on the various measures that the appraisal report has shown to be necessary to ensure the success of the project; these agree-

ments are then converted into legal obligations, set out in the loan documents. To illustrate: let us suppose that the revenues of a public utility are insufficient because there has been uneconomic pricing of electricity, and we have agreed with the borrower that, in order that the utility may earn an adequate rate of return and to finance a reasonable proportion of its new investments, prices must be increased by, say, 20 per cent immediately and 10 per cent in two years' time. There will be a financial covenant, decided upon during negotiations, which defines the over-all financial objectives of the utility and specifies the necessary rate of return and the timing of the rate increases. The

managerial, organization, commercial aspects—in fact all of the issues that have been raised prior to and during the appraisal—are dealt with in the loan documents. For example, if it is concluded that a road should have only a gravel surface rather than asphalt paving, the project description will stipulate this. If consultants are required in connection with some part of the project, the borrower will agree to recruit and maintain consultants satisfactory to the Bank. Thus, the negotiations and the drafting of the legal documents are an essential part of the process of ensuring that the findings of the appraisal are translated into actions that are agreed with the borrower and will be implemented on an acceptable schedule.

After negotiations, the appraisal report is updated to reflect the agreements reached during negotiations, and the revised report, together with related documents, is given to the Bank's Executive Directors. If the Executive Directors approve the operation, the loan or credit is then signed in a simple ceremony which marks the end of one stage of the cycle and the beginning of another.

SUPERVISION

The final stage in the life cycle of an individual project is its supervision during the period of construction and subsequent operation. The purpose of such supervision is to ensure that the project is executed as planned, or modified in the light of changing circumstances, so that the development objectives are achieved.

Supervision is the least glamorous part of project work. Once the ceremony attendant upon the signing of a loan or credit has passed, the attention of planners and policymakers shifts to the new projects that are coming along; this attitude is understandable and it is reinforced by the fact that many months may elapse before the "old" project begins to yield tangible results. Nevertheless, supervision is an essential stage in the project process. It is obvious that however well a project has been identified, prepared, appraised, and negotiated, it is only when it is properly executed that the development benefits are realized. Moreover, development is by definition a dynamic process, and the circumstances under which the project is implemented may not coincide in all respects with those envisaged at the time of appraisal. An important part of the supervision process may therefore be to adapt the project to these changing circumstances, and in this sense "supervision" is a misnomer which does not do justice to the work involved. It is for these reasons that we have concluded that adequate supervision should have first priority in the assignment of project personnel.

As with all other stages, project supervision takes place in a variety of ways. During negotiations we will

have agreed on a schedule of progress reports which the borrower is to prepare and which cover such questions as the physical execution of the project, its costs, and, if it is a revenue-earning enterprise, the financial status of the borrower. These reports are generally submitted at three-month to six-month intervals, and they may be prepared by the borrower or by its consultants. They are reviewed by the Bank staff in Washington, the same team which has been involved in all the earlier stages of the project cycle, and problems brought to light by the reports are handled in the first instance by correspondence.

A principal feature of project supervision covers the procurement of the goods and services that are financed under the loan or credit. One of the most important roles of the Bank is to see that this procurement is carried out in accordance with guidelines that have been established for this purpose and that are published in a booklet which is widely circulated. These guidelines are designed to ensure that the works are contracted or the equipment purchased in the most economical manner. The principal device that has been developed over a considerable period of time to this end is international competitive bidding among qualified contractors or manufacturers. The guidelines give detailed ground rules about how this international competitive bidding is to take place. Seeing that these rules are observed in practice—and a single loan or credit may involve anywhere from one to several hundred individual contracts, all of which may have to be reviewed by our staff—becomes a time-consuming job and one that we take very seriously. Sometimes it is relatively straightforward and routine; on other occasions it becomes a major issue, as, for example, in the case of a telecommunications or power project where orders are being placed in amounts of \$5 million, \$10 million, or \$15 million; and it may come to a very close choice among several international suppliers as to which is the lowest evaluated bid. I should make it clear that it is the borrower, not the Bank, that is responsible for evaluating the tenders or bidding documents. The Bank's role is to review the borrower's work to make sure that it is done properly and that the rules have been observed. Our approval is required before the contract can be placed. And you can be sure that, if there is a controversy, it is called to the Bank's attention at an early stage.

The tasks that I have been describing so far are the ones that are done primarily in headquarters. We also send supervision missions to the field to see how the project is going forward and what difficulties are being encountered in its execution. The frequency of these visits varies with the nature of the project. On the average, we send a supervision mission every nine months to active projects. This is not as often as we would like, and we are taking measures to increase the

frequency of supervision visits. Ideally, if we could get supervision missions into the field two or three times a year, we would be able to work more closely with our borrowers to deal with problems expeditiously and to see that the project is going forward quickly and achieving the best results. In the periodic reviews of our supervision work some projects (currently about 10 per cent of the total) are classified in a special "problem" category, and these are watched with particular care and receive more frequent visits.

Supervision is a process of learning by experience. The lessons drawn are used not only to modify the on-going projects as necessary, but also in the formulation of similar types of projects in the future. In the supervision process the results of the Bank projects are thus being continuously evaluated. This is not, in our view, a substitute for a full-scale review of selected projects, once they have been in operation for a sufficient number of years, to measure their actual results against the original expectations. The Bank has completed or has in process several such reviews, and more are contemplated on a regular schedule. We have also collaborated with various outside groups which have conducted independent studies of Bank projects.

The supervision mission has among its tasks the review of the preparatory studies of future projects included (in "piggyback" fashion) in the loan or credit. It also provides the continuing relation with our borrowers from which new projects are identified and brought forward. In this way, supervision leads to identification and preparation, and the project cycle renews itself.

Warren C. Baum, a citizen of the United States, has been a member of the staff of the World Bank since 1959, having been both an economist and a loan officer in the European Department before becoming the Chief of the then Transportation Division of the Projects Department. He subsequently served as Deputy Director of that Department and is now Associate Director, Projects. He was educated at Columbia University and Harvard University and received a Ph.D. in economics from the latter institution in 1949. Mr. Baum is the author of *The French Economy and the State* and several articles.

THE CYCLE REVIEWED

Summed up, here are the main points that I have tried to make:

- the relatively small, but growing number of operations in which the World Bank engages each year;
- the wide variety of projects for which we make loans or credits;
- the wide variety of paths that they follow in entering the pipeline and moving through it;
- the broad scope of our interest from development program to sector to individual project;
- the importance of project supervision;
- and particularly the close association that has grown up between the Bank, the government, and the borrower at all stages of the project cycle.

We have found that to help prepare and execute projects that will make a useful contribution to development we must get into the project cycle at the earliest stage and remain with it continuously.

Despite the differences that inevitably arise on occasion when difficult issues must be decided, the relations that have developed between the Bank and most of our borrowers in this continuing process have become quite good. They have come to appreciate that the Bank has no ax to grind, that we are in business to assist their development by lending for well-conceived and executed projects, and that this is our primary, indeed our only, interest in project work.



Address by Mr. Warren Baum
Associate Director--Projects
International Bank for Reconstruction and Development
at the
Annual Public Affairs Conference
American Institute of Architects -- Consulting Engineers Council
Washington, D.C. March 4, 1971



Mr. Chairman:

I am glad to be here. We in the World Bank always welcome a frank discussion with engineers, architects and other consultants. The reason is simple: both we and our clients, the less developed countries, need you. We need your services. We also need your support and understanding -- not only of our methods and procedures, and the reasons for them, but of our objectives and how they relate to the hopes we all have for a more stable, prosperous, and perhaps peaceful world.

The World Bank and its affiliates finance a rather large flow of exports, both of goods and services, to the low-income countries, chiefly from the United States, Canada, Europe and Japan. The volume has been running around \$800 million a year, and it is growing. It will continue to grow until disbursements catch up with rising commitments, which are already at a level three times that high.

I must emphasize, however, that we are not in business in order to finance exports. The only purpose for which we exist -- we are a group of international institutions owned and controlled by 115 member governments -- is to help our poorer members raise their output and living standards as fast, as efficiently, as cheaply as possible. Our ultimate objective is their independence from special assistance, whether from us or from others. When that is achieved, when all nations can stand solidly on their own feet, earn their own way and make their full contribution to world trade while continuing to raise their standards of living, our job will be done.

Unfortunately, it will be some time before we run out of work. For many years there will be need for the kinds of special help we and others provide, including the mobilization and deployment of capital for development projects which are beyond the capacity or the concern of private financial and industrial institutions. Moreover, the need will be greater over the next several decades, rather than less.

You and your professional colleagues in other countries have a crucial role to play in the expansion of our activities. This is primarily what I wish to explore with you in the next few minutes.

We can approach this question first from the point of view of the volume of our lending and expenditures on consultants' services, which

will give us some inkling of the magnitude of the work to be done; second, we can look at it in terms of our methods, procedures and experience in the employment of consultants; and, third, we can explore it in the light of major trends which are likely to affect the need for and uses of consultants in coming years.

As for volume, the immediate past offers some guide to the near future. The last two years have been a period of very rapid growth in our lending, and even faster growth in the use of consultants. Last year the volume of our lending was almost exactly twice as large as the average for the previous five years, just under \$2.3 billion, and we expect to raise the level by 1973 to at least \$2.7 billion a year of new lending.

As our lending operations become not only more numerous but also more complex and diversified, the share of consultants in our expenditure inevitably expands. In 1968, fees to consultants employed by our borrowers totaled about \$36.5 million, or 3.3 percent of disbursements. In the following year, the amount rose to \$43.6 million, and the percentage to about 4.3. In fiscal year 1970, about 6 percent of disbursements were paid out to consultants on projects, and the dollar amount rose to \$56.1 million.

These rather dramatic increases in consultants' fees, both absolutely and as a percentage, occurred during a period when total disbursements, unlike commitments, were virtually stationary at about \$1 billion a year. If such percentages hold as disbursements reach the new level of commitments, it is easy to see that we shall soon be paying out more than \$100 million a year for consultants employed by our borrowers.

As you may already be aware, American consulting firms have been very successful in competing for contracts in connection with the projects we finance. In the last three fiscal years, well over 40 percent of such business contracted by our borrowers went to American firms, and in fiscal 1970 the figure was 46 percent. Under the procedures we encourage our borrowers to employ, all consultants get an even chance to obtain business under our loans and credits. Furthermore, there is considerable competition; many other countries, including more and more in the developing world, have first rate engineers and consulting firms. In these circumstances, the American consulting professions can be proud of the record I have just cited.

Our standards are high, and we insist on them. That is how we have acquired one of our most valuable assets, a reputation for technical excellence which helps to maintain the Triple-A rating of our bonds and our ability to borrow at very favorable rates. In the process we have relied heavily on consultants for two decades, often requiring their employment as a condition of our loans. We have always insisted that consulting firms be selected for their competence to perform the specific job at hand. Fees are negotiated only after the firm has been chosen on that basis. We believe this is the best way to assure the high quality we demand, and the record seems to support this view.

Let me now describe the three principal ways in which we are involved in the use of consultants. First, and by far the most important in numbers and cost, are the consultants our borrowers employ on projects we finance. These are the only ones I have mentioned up to now, and all the figures I have quoted apply only to them.

We insist on the employment of outside consultants whenever, in our judgment, the borrower's own technical capabilities are inadequate. Except in rare cases, for example when the borrower lacks experience and the project requires knowledge of special engineering techniques available only from a limited number of firms, the Bank remains carefully aloof from the choice of a consulting firm. Contrary to a myth which has been popular in engineering circles and which dies hard, we do not maintain any "list of eligible firms," nor do we suggest the names of firms to the borrower. The choice is strictly the borrower's responsibility.

We do, however, retain the right to approve or disapprove the borrower's choice, solely in terms of the firm's competence for the particular job. We also insist on the right to review and approve the terms of the firm's contract, in order to assure, among other things, that it will have sufficient authority to see that the Bank's money as well as the borrower's is effectively used.

The second category of consultants with which we are involved consists of those we employ directly to augment our own staff capabilities. Both the numbers and the costs are relatively small. During 1970, for example, we employed 528 individual consultants from 43 countries for a total of about 1,038 man-months, on a wide variety of assignments. More than 40 percent of this work was performed by American citizens.

Finally, there are the technical assistance projects for which we employ consultants. These are usually pre-investment studies to lay the groundwork for future lending. Over the years, about four-fifths of the financing for this purpose has been provided by the Special Fund of the United Nations Development Programme (UNDP), since in the U.N. system theirs is the primary responsibility for such work; when they are not prepared to finance a study which we feel is essential, however, we finance it ourselves. In the 10 years to the end of 1970, consultants' contracts let by the Bank for this type of work averaged about \$6.2 million a year. The proportion going to American firms has varied widely, with an average for the 10 years of a bit more than 32 percent.

The volume of work on pre-investment studies is likely to increase for some time to come. This likelihood is related to the new trends in development, and in our approach to development financing. They are bound to increase the demand for consultants' services, just as they have doubled the volume and greatly increased the scope of our lending operations and technical assistance.

We are now taking a much more comprehensive view of the development process. In part this is simply because accumulated knowledge has more fully illuminated a field which the light of experience had hardly touched 15 or 20 years ago. In part it has been forced upon us by the emergence on the international scene of several overriding problems.

One of these is the growth of population at a rate unique in history. Quite apart from its apocalyptic implications, the population explosion has already made invisible much of the benefit from two decades of massive development effort. Mr. McNamara seized this nettle when he came to the Bank nearly three years ago. Starting from scratch, we are now mounting an active program of lending in this field.

Another massive threat, which came to the world's attention on the wave of population growth, is famine. Thanks to the so-called "green revolution," the actuality has been averted, or at least postponed. But the threat will remain, unless population growth can be sufficiently reduced or food production sufficiently increased, or both.

This became inescapably clear in the mid-60s, when the growth of world population exceeded the increase in food production, and this country's grain surpluses began to run low. The recognition of potential disaster was followed by a realignment of development priorities in many countries. The key role of agriculture was no longer in doubt. Until then, there had been a tendency to equate development with industrialization and to overlook the factory's crucial reliance on the farm. Few projects in agriculture were proposed, and they were limited for the most part to large schemes for irrigation, flood control, drainage, or the import of farm machinery. Far too little had been learned, therefore, about the core of the food productivity problem: how to get adequate credit, new technology and institutional services to the individual farmer, and how to both teach and persuade him to use them effectively.

There has been a dramatic change. In the case of the World Bank, in the last five years we have put more than twice as much into agriculture as in the previous 19 years, and in the three years ending in mid-1973 we expect to raise the present level by more than a third, to well over \$550 million a year. Accompanying the increase in volume has been a broadening of our approach, which now seeks to embrace the agricultural problem as a whole rather than isolated projects. Irrigation schemes, for example, are considered only as part of a total setting. Making water available is not enough. New crops may have to be introduced, or more intensive methods of cultivation, or even multiple-cropping. Such changes may require radical shifts in farming practices. If peasant farmers are to adopt them, agricultural services may have to be organized and qualified people trained to man them. To handle the anticipated new production, supporting investments may be necessary in storage and processing facilities, transport and marketing. The construction of farm-to-market roads requires a higher priority. Resettlement programs are often necessary. If full use is to be made of irrigation water, investments must

be made on the farm, requiring adequate incentives and appropriate credit. We are now deeply involved in these and other aspects of a pervasive movement directed towards a fundamental transformation of the most retarded sector in two-thirds of the world.

Two other major problems that have forced themselves on the world's attention are closely related, both to each other and to trends in population growth and the lag in food production. These are the massive flood of people into overcrowded cities, and swiftly-rising rates of unemployment. I cannot say that we know the answers, but we are trying hard to ask the right questions. Meanwhile, we have started to act on the knowledge we have. We are beginning to finance projects to help forestall some of the more serious consequences of urbanization, and at the same time to diversify production in both industry and agriculture.

For nearly nine years, we have been financing strategic projects in education, designed to help our member countries make their investments in this crucial sector more productive in terms of development needs. In this field also, both our approach and our role are expanding. Last year in the Ivory Coast, we financed our first project to test the use of educational television on a broad scale at the primary level. If successful, this can have an immense impact in countries where the absolute number of illiterates continues to rise despite massive investments which have doubled and tripled school enrollments.

In the last three years, we have increased by about 75 percent the support we give to development finance companies, which provide both technical and financial assistance to small and medium-sized private ventures in many developing countries. We have intensified our efforts to help in the development of tourist facilities in member countries where the potential for this industry is promising. Even in such traditional fields as transportation we are now considering a wider range of projects such as container terminals in ports, civil aviation, and pipelines. We have also recognized the necessity to consider the ecological consequences of development projects, a matter of increasing concern throughout the world. Every project we finance is now subject to the scrutiny of qualified ecologists, so that our borrowers may avoid at least some of the abuses of the environment which have accompanied development in the past.

Despite all this change, our basic methods and procedures have remained the same. We look at projects only in the light of the borrowing country's general economic position and prospects, and we try to choose and to help borrowers to prepare those with the highest priority in terms of the country's development.

When we consider financing a specific project, we send out an appraisal mission to make a thorough examination of all its technical aspects. If weaknesses are found in policy, organization, administration or technical capability, we recommend improvements; if necessary and requested by the

borrower, we provide technical assistance to carry them out. If the mission's report is favorable and our various internal review committees approve the project, we invite the Government to send officials who are authorized to negotiate a Loan Agreement.

Many of the conditions which are common to all such agreements stem directly or indirectly from our basic law, the Articles of Agreement. For example, the Articles prohibit the Bank from requiring that the proceeds of any loan be spent in the territory of a particular member or members. Consequently international competitive bidding is used whenever possible for the procurement of equipment and construction which we finance.

As you may be aware, this has been a source of some dissatisfaction in recent years as the ability of American suppliers and contractors to obtain business on these terms has diminished. Actually, after falling over a period of years, the proportion has begun to rise. Two years ago, it was barely 18 percent. Since then it has climbed steadily, reaching 23 percent in fiscal year 1970 and more than 24.5 percent in the first half of fiscal 1971. On a cumulative basis, incidentally, procurement of goods and contractors' services in the United States represents about a third of the total financed by the Bank and IDA. This is approximately the same as the proportion of American subscriptions and contributions in the total of usable resources available to the Bank and IDA. Over time, the American share in Bank procurement has tended to fluctuate with the competitiveness of U.S. industry in world markets as a whole. Of course, we do not seek to guarantee that any country will obtain a particular share of the Bank's business; our procedures are designed to ensure that all countries have a fair and equal opportunity to compete on the basis of their ability. While we are satisfied that our procedures achieve this purpose, we periodically examine them from this point of view and will continue to do so.

In adhering to international competitive bidding, we are mindful of the responsibility we owe to our clients, to private investors in our bonds, and to governments which provide resources for IDA. That is to assure the most economical use of the funds we invest. Long experience, many specific cases, and special studies of individual countries, demonstrate that international competitive bidding results in lower cost for equal quality. Quality is no less important than price, and the quality standards we insist upon are reflected in specifications which constitute the basis for bidding procedures. These procedures are normally supervised by consultants employed by our borrowers, subject to our review.

As you have no doubt sensed from this brief account, important changes are in the making -- in the volume, scope and complexity of our operations. By the same token, there will be significant changes in the scope of work to be performed by consultants, requiring an even broader range of experience and expertise.

This, however, will be a gradual process. For the foreseeable future, a large part of our work in terms of volume will continue to be on the traditional types of projects in public utilities, transport, agriculture, and industry, with lesser amounts in education, water supply and tourist facilities. In these and in all fields, your contribution has been invaluable in the past. I hope and expect that we can count on your continued interest and cooperation in the future.



The World Bank's Project Cycle

By Warren C. Baum

Reprinted from **American Banker** September 25, 1978

*This article revises and updates one originally published in the
June 1970 issue of FINANCE AND DEVELOPMENT*

The World Bank's Project Cycle

Reprinted from American Banker, September 25, 1978

By WARREN C. BAUM

Vice president, Central Project Staff, World Bank,
Washington.

This article revises and updates one originally published in the June, 1970 issue of Finance and Development and is based on a version that will appear in a forthcoming edition of the magazine, a quarterly publication of the International Monetary Fund and the World Bank. The author wishes to express his appreciation to Messrs. John A. King and Herman G. van der Tak for their contributions to this article.

If the question "What does the World Bank do?" had to be answered in a few words, those words would be: "It lends for development projects." The Bank's main business is to lend for specific projects, carefully selected and prepared, thoroughly appraised, closely supervised and systematically evaluated. Since opening its doors in 1946, the Bank and, beginning in 1961, its soft-loan affiliate, the International Development Association (IDA), have made some 2,350 development loans and credits for a total of more than \$58 billion.¹ Of these, the overwhelming majority, well over 90% have been for specific projects, such as schools, crop production programs, power dams, roads and fertilizer plants. This concentration on project lending derives from the Bank's Articles of Agreement, which require that, except in special circumstances, the Bank shall lend only for specific projects of reconstruction or development.

This requirement, intended to avoid some of the unsound practices in international lending in the 19th and early 20th centuries, is directed at ensuring that Bank

funds are invested in sound, productive projects which contribute to the development of the borrowing country's economy as well as to its capacity to repay the loan. The Bank is both a developmental and a financial institution, and each project for which it lends must satisfy both features of the institution.

The numbers of projects and the amounts loaned have grown markedly over recent years. In the early 1950s, the Bank was making fewer than 20 loans a year, mostly in Europe and Latin America, totalling about \$400 million. In fiscal 1967 there were 67 loans, more widely spread geographically, totalling \$1.1 billion. In the fiscal year ending this June, 236 loans were approved for 74 countries and a total of \$8.4 billion.

There has been no less a change in the character of projects. Bank lending has become increasingly development oriented, in terms of borrowing countries, development strategy, sectors of lending, and project design.

- In terms of countries, lending has been directed increasingly towards the poor and less-developed countries in Asia, Africa, and Latin America.

- In terms of development strategy, the so-called "trickle-down" theory, which assumed that the benefits of growth would eventually reach the masses of the poor, has been replaced by a more balanced approach, combining accelerated growth with a direct attack on poverty through programs to raise the productivity and living standards of the rural and urban poor.

- In terms of sectors, the emphasis has shifted from basic infrastructure (roads, railways, power) and industry to a more comprehensive program aimed at growth, provision of basic services, and better income distribution. While infrastructure continues to be important, lending for agriculture and rural development, urban

sites and services, water supply and sanitation, education, population, and nutrition has been introduced or expanded greatly. Even within the traditional sectors, a similar evolution can be traced: power projects are now more concerned with the structure of tariffs to promote more economical use and mass consumption, and with environmental issues; road projects give more emphasis to the need for feeder roads to open up new areas, to adequate systems of maintenance, and to appropriate technology for construction; development finance companies are increasingly concerned with lending for small-scale enterprises.

- In terms of project design, greater attention is given in all sectors to income distribution and employment, impact on the environment, development of local resources and institutions, training of local personnel, and overcoming social and cultural constraints.

This evolution in the development orientation — and I would say in the quality — of Bank lending can be illustrated, at the risk of oversimplification, by comparing a "typical" loan of the 1950s with a "typical" loan of the mid-70s. The 1950 loan would be for power generation in a middle-income developing country. In a sense it would be an "enclave" project, designed and supervised by foreign consultants, executed by foreign contractors and supplies, and managed with the help of expatriates. The technical and financial viability of the project would be analyzed, as would be its organization and management, but little attention would be paid to its setting within the energy sector, to how the power would be distributed, and to the impact of the level and structure of tariffs on electricity consumption.

The loan of the 1970s would be for rural development in a low-income developing country. It would provide an integrated package of goods and services (extension,

¹ Loans are made by the Bank at an interest rate, adjusted periodically in relation to its cost of borrowing, which is currently 7.9%; IDA provides credits on concessionary terms of 50 years and a service charge of ¾% a year. The methods of project work are identical for the two institutions and in this article all references to the Bank and to loans apply equally to IDA and credits.

credit, marketing, storage, infrastructure, research) to raise the productivity and living standards of the farmers. Existing local institutions would be strengthened or new ones established; local staff would be used as much as possible, with the help of extensive training programs; low-cost design and appropriate technology would be emphasized, giving greater opportunities for local contractors and sources of supply; a built-in system of monitoring and evaluation would help to adjust the project as it went forward and to draw lessons for future projects; and attention would be paid to cost recovery from the beneficiaries so that the project would be replicable.

Notwithstanding this record of growth and change, the Bank is still dealing with a relatively small number of projects, each of which is quite large; the average loan is now about \$35 million, for a project investment of \$110 million. Bank-financed projects can have an important demonstration effect. It remains no less important, therefore, that they be of high quality in terms of development impact, and economic, technical and financial soundness. No two projects are alike; each has its own history, and lending has to be tailored to its circumstances.

On the other hand, each project passes through a cycle which, with some variations, is common to all. This article will discuss the phases of the project cycle — identification and supervision; and evaluation — and the Bank's role in each of them. Each phase leads to the next, and the last phases, in turn, produce new project approaches and ideas and lead to the identification of new projects, making the cycle self-renewing.

The Bank's role in the project cycle is performed largely by its projects staff who now total about 1,100, drawn from almost 100 nationalities. Projects staff comprise almost three-quarters of all operational staff and nearly half of all professional staff. Though there are substantial groups of economists, financial analysts, and various kinds of engineers — civil, mechanical, electrical and sanitary, for example — an extraordinary variety of other disciplines is also represented: agronomists, specialists in tropical agriculture, irrigation, soils, ground water, agricultural credit, livestock, fisheries, and agro-industry, forecasters, demographers, architects, rural and urban sociologists, physicians and public health and nutrition experts, environmentalists, educators, energy specialists, and physical planners.

Typically, technical specialists come to the Bank in mid-career, after extensive experience in their field, some of it in developing countries, and sometimes with experience as managers. Projects staff are expected to have a broad understanding of development judgments. It is probably

safe to say that, in terms of its size and national and professional diversity, the Bank's projects staff is unique.

Identification

The first phase of the cycle is concerned with identifying projects which have a high priority, which appear suitable for Bank financing and which the Bank, the government and the borrower² are interested in considering. In the early years of the Bank, project identification was done *ad hoc*, largely in response to proposals by governments and borrowers. Over the years, however, the Bank has encouraged and helped countries to develop their own planning capabilities, and it has also strengthened its own methods of project generation. Economic and sector analyses provide an understanding of the development potential of the country and a framework for evaluating national and sectoral policies and problems. They also assess the country's "creditworthiness" for Bank or IDA lending. The analysis provides the basis for a continuing dialogue between the Bank and the country on an appropriate development strategy for the economy as a whole and its major sectors, including policy and institutional changes. It is then possible to identify projects which fit into and support a coherent development strategy, which meet sectoral objectives, and which both the government and the Bank consider suitable. These projects must also meet a *prima facie* test of feasibility, i.e., that technical and institutional solutions are likely to be found at costs commensurate with the expected benefits.

Identifying a project which meets these requirements is not easy. Knowledge on which to reach sound judgments may be lacking. The government and other lending agencies may not share our views on development objectives or sector priorities. There may be difficult choices regarding the scope of the project (e.g., should it start with a pilot/experimental phase or with a larger but more risky investment?). Differences may quickly surface on the need for policy or institutional reforms to achieve the project's objectives. Resolving some of these issues may extend well into the preparation stage.

In practice, how are projects identified within this context? Both the Bank and the government are involved, making the process complex, and this complexity is compounded by the differing capabilities of governments for handling economic

planning and project generation. The Bank always makes its own economic analysis of the country, but the character of that analysis is affected by the extent and quality of the country's data base and its own economic analysis of the country, but the character of that analysis is affected by the extent and quality of the country's data base and its own economic work. Sector analysis might be done by the Bank itself, or might be carried out through one of the Bank's cooperative programs with a specialized United Nations agency, or through studies financed by the United Nations Development Program, bilateral aid programs or a specific provision for studies in a prior Bank loan, sometimes called "piggy-backing."

Finally, some projects are brought forward by private sponsors such as mining and petroleum enterprises seeking to develop new resources. These projects have to meet the standards described above before being regarded as "identified" from the Bank's point of view.

Once identified, projects are incorporated into a multi-year lending program which forms the basis for the Bank's future work in the country. In the aggregate, country programs are used for programming and budgeting the Bank's operations and for assuring availability of the resources necessary to bring each project forward through the successive phases of its cycle.

Preparation

After a project has been incorporated into the lending program, it enters the project pipeline, and an extensive period of close collaboration between the Bank and the eventual borrower begins. A project brief is prepared for each project, describing its objectives, identifying principal issues, and establishing the timetable for its further processing. The preparation phase is difficult to characterize because it depends on the nature of the project, the experience and capability of the borrower, the knowledge currently available (e.g., whether it is the first loan to the sector/borrower or a "repeater"), the sources and availability of financing for preparation, and the relationships between the Bank, the government, the borrower and other donors who may be involved.

Normally, preparing a project to the appraisal stage requires a substantial effort extending over one or two years, sometimes longer. Responsibility for preparation rests with the borrower. At one time the Bank was reluctant to assist in project preparation on the banker's principle that such involvement might prejudice its objectivity at appraisal. But experience has demonstrated that the Bank must have an active role in ensuring a

² For Bank loans, the borrower can be the government itself, a public agency or corporation, or a private body or corporation with the government's guarantee. IDA credits are made only to governments, to be passed on, if necessary, to the entity responsible for carrying out the project. In this article, "borrower" refers to that entity, whether or not it is technically the borrower.

timely flow of well-prepared projects. That role has a number of aspects: making sure that borrowers with the capability and resources to prepare projects themselves understand the Bank's requirements and standards; helping other borrowers to find the financing or technical assistance for preparation work, and filling gaps in projects which have been incompletely inadequately prepared.

In practice, the Bank rarely does preparatory work itself, since this would be a very expensive use of its staff. Exceptions are the Bank's Regional Missions in Eastern and Western Africa, which were established primarily to supplement the limited capabilities of governments in those regions to identify and prepare sound projects.

Financial and technical assistance for project preparation can be extended in a number of ways. For example, the Bank can provide special loans for technical assistance or detailed engineering, make advances from a recently established Projects Preparation Facility, reimburse the borrower under the loan in question for preparatory work done earlier, or include funds for this purpose in a loan for another project in the sector. Cooperative programs between the Bank and the Food and Agriculture Organization of the United Nations, the United Nations Educational, Scientific and Cultural Organization, the World Health Organization, and the United Nations Industrial Development Organization are also an important source of support, as are the UNDP and bilateral aid programs. While Bank financing must be repaid by the borrower, most of the other assistance is provided on a grant basis and hence is especially attractive for borrowers.

In providing this help, we must be careful that the project is not perceived as "the Bank's project" and that the government and the borrower are deeply involved in its preparation and fully committed to it. This is more relevant for the newer-style projects than for traditional infrastructure. In the latter there is usually a well-established entity — a power agency, a highway department, a port authority — and its objectives and the ways of achieving them are reasonably clear. For the newer-style projects these conditions often do not exist, yet the commitment of the government and the borrower is essential not only for preparation, but, even more, for successful implementation.

Preparation must be concerned with the full range of technical, institutional, economic and financial conditions necessary to achieve the project's objectives. For example, a resettlement project might require studies based on remote sensing data to locate arable land, transportation corridors, and the present

The World Bank is both a developmental and a financial institution, and each project for which it lends must satisfy both features of the institution.

population in the area proposed for resettlement. Verification on the ground would be followed by more detailed investigation of soils and water resources; determination of the appropriate cropping pattern on the basis of available resources and research knowledge; selection of the technical package necessary for increasing crop yields; economic and sociological studies of the people being settled to determine appropriate systems of land tenure, extension services, marketing systems, project management and other institutional arrangements. Government policies with respect to the cost of inputs and the prices of farm products would be studied, as well as levels and methods of cost recovery and their impact on the financial position of the beneficiaries and the government.

A critical element of preparation is identifying and comparing the technical and institutional alternatives for achieving the project's objectives. Most developing countries are characterized by abundant and low-cost labor and scarce capital. We are, therefore, not looking for the most advanced technological solutions but for those which are most appropriate to the country's resource endowment and stage of development. Though the Bank has financed advanced telecommunications equipment and the most modern container port facilities, we nevertheless consider such questions as whether oxen are more economical than tractors for crop cultivation; slum upgrading of sites and services more suitable than conventional housing as minimum accommodations for the urban poor; or public standpipes more appropriate than house connections for water supply. Preparation, thus, requires feasibility studies which identify and prepare preliminary designs of technical and institutional alternatives and compare their respective costs and benefits, and then go on to a more detailed investigation of the more promising alternatives until the most satisfactory solution is finally worked out.

All this takes time, and the Bank is sometimes criticized for the length of time required to make a loan. But for the countries concerned each project represents a major investment with a long economic life, and the time spent in arriving at the best technical solution, in setting up the

proper organization, in anticipating and dealing in advance with marketing and other problems, usually pays for itself several times over.

Appraisal

As the project takes shape, and studies near completion, the project is scheduled for appraisal. Appraisal is perhaps the best known phase of project work, in part because of the Bank's direct involvement. It is a critical stage of the project cycle because it is the culmination of the preparatory work, provides a comprehensive review of all aspects of the project, and lays the foundation for implementing project and evaluating it when completed.

Appraisal is solely the Bank's responsibility. It is conducted by Bank staff, sometimes supplemented by individual consultants. The appraisal mission, which usually spends three to four weeks in the field, is normally composed of a project economist, appropriate technical specialists, and, for revenue-earning projects, a financial analyst. Total staff may range from three to five, and occasionally more. If the preparation has been done well, the appraisal can be relatively straightforward; if not, a subsequent mission or missions may be necessary to complete the job. The appraisal covers four major aspects of the project — technical, institutional, economic and financial.

Technical. Since its earliest days, the Bank has given close attention to technical aspects to ensure that projects are soundly designed, appropriately engineered, and follow accepted agronomic, education or other standards. These matters are all addressed during preparation. The appraisal mission looks into the technical alternatives considered, the solutions proposed, and the expected results.

More concretely, technical appraisal is concerned with questions of physical scale, layout and location of facilities; the technology to be used, including types of equipment or processes; the approach to be followed for the provision of services; the realism of the implementation schedule; and the likelihood of achieving the expected levels of output. In a family planning project, the technical appraisal might be concerned with the number, design, and location of maternal and child health clinics, and the appropriateness of

the delivery services in relation to the needs of the population being served; in highways, with the width and pavement of the roads in relation to the expected traffic, the trade-off between initial construction costs and recurrent costs for maintenance, and between labor- and capital-intensive methods of construction; in education, whether the proposed curriculum and the number and layout of classrooms, laboratories, and other facilities are suited to the country's educational needs.

A critical part of technical appraisal is a review of the cost estimates, and the engineering or other data on which they are based, to determine whether they are accurate within an acceptable margin and whether allowances for physical contingencies and expected price increases during implementation are adequate. The technical appraisal also reviews proposed procurement arrangements to make sure that the Bank's requirements are met. Procedures for obtaining engineering, architectural or other professional services are examined. In addition, technical appraisal is concerned with estimating the costs of operating project facilities and services and with the availability of necessary raw materials or other inputs. The potential impact of the project on the human and physical environment is examined, to make sure that any adverse effects will be controlled or minimized.

Institutional. In the Bank's current terminology, "institution building" has become perhaps the most important purpose of Bank lending. By this is meant that the transfer of financial resources and the construction of physical facilities, however valuable in their own right, are less important in the long run than the creation of a sound and viable "institution," interpreted in its broadest sense to cover not only the borrowing entity itself, its organization, management, staffing, policies and procedures, but also the whole array of government policies which condition the environment in which it operates.

Experience indicates that insufficient attention to the institutional aspects of a project leads to problems during its implementation and operation. Institutional appraisal must, therefore, address a host of questions, such as the following:

- Is the entity properly organized to do the job and, if not, should a new entity be established or the present one reorganized?
- Is management adequate to its tasks and, if not, how can it be strengthened?
- Are local capabilities being used effectively and how can they be developed at all levels through training or other programs?
- Are policy or institutional changes required outside the entity to achieve project objectives?

These questions are important for traditional project entities — public utilities, railways, ministries of works or education — but they are even more important and difficult to answer for the entities charged with preparing and carrying out the newer-style projects intended to benefit the rural and urban poor. Here, there may be no institutional pattern to follow, and the entity may have to be designed, organized and staffed *de novo*. Our experience to date has not yielded any ready-made solutions for putting together an institution which can effectively and economically deliver goods and services to large numbers of people — who are often in remote areas and outside the ordinary ambit of government — and which can motivate them and change their behavior.

Of all the aspects of a project, institution building is perhaps the most difficult to come to grips with. This is in part because its success depends so much on understanding the cultural environment. We have come to recognize the need for a continuing re-examination of institutional arrangements, an openness to new ideas, and a willingness to adopt a long-term approach which may spread over several projects.

Economic. The cost-benefit analysis of alternative project designs serves to select the one which contributes most to the development objectives of the country. This analysis will normally have been done in successive stages during project preparation, but appraisal is the point at which the final review and assessment are made. It is the logical outcome of the process which starts with initial identification, which, as already mentioned, aims to select projects in the context of sectoral priorities and their contribution to a national development strategy.

Economic appraisal, therefore, studies the project in its sectoral setting. The investment program for the sector, the strength and weaknesses of sectoral institutions, and key government policies are all examined. In transportation, each appraisal considers the transportation system as a whole and its contribution to the country's economic development. A highway appraisal examines the relationship with competing modes of transport such as railways. Transport policies throughout the sector are reviewed and changes recommended for example, in any regulatory practices which distort the allocation of traffic. In education, power, and telecommunications, the "project" as defined by the Bank may embrace the investment program of the whole sector. In agriculture, which is more diversified and accounts for a much larger share of a developing country's economic activity, it is more difficult to formulate a comprehensive strategy for the sector, but attention is given to sectoral issues such as

land tenure, governmental tax, pricing and subsidy policies, and availability of public services.

Whenever the current state of the art permits, projects are subjected to detailed analysis of their costs and benefits to the country, the result of which is usually expressed as an economic rate of return. This analysis often requires the solution of difficult problems such as how to determine the physical consequences of the project, and how to value them in terms of the development objectives of the country. Over the years, the Bank has kept in closest touch with progress in the methodology of economic appraisal. "Shadow" prices are used routinely when true economic values of costs or benefits are not reflected in market prices as a result of various distortions, such as trade restrictions, taxes or subsidies. These "shadow" price adjustments are made most frequently in the exchange rate and labor costs used in the calculations. The distribution of the benefits of the project and its fiscal impact are considered carefully, and the use of "social" prices to give proper weight in the cost-benefit analysis to the government's objectives of improved income distribution and increased public savings is passing through an experimental phase. Since the estimates of future costs and benefits are subject to substantial margins of error, an analysis is always made of the sensitivity of the rate of return to variations in some of the key assumptions; in less frequent cases of major uncertainty, a risk-probability analysis is also carried out. The optimal timing of the investment is tested in relation to the first year's benefits. When the Bank provides funds to intermediate agencies (development finance companies, agricultural credit institutions) for on-lending to smaller operations, or in the case of sector lending, the agencies' own appraisal methods must be acceptable.

Some of the elements of project costs and benefits, such as pollution control, or better health or education, or manpower training, may defy quantification; in other projects, for example, electric power or telecommunications, it may be necessary to use proxies, such as revenues, which do not fully measure the value of the service to the economy. In some cases it is possible to assess alternative solutions having the same benefits and select the least cost solution. In other cases, for example education, alternatives are likely to involve different benefits as well as different costs, and a qualitative assessment must suffice.

I should like to stress two points in this connection. One is that, whether qualitative or quantitative, the economic analysis always aims at assessing the contribution of the project to the development objectives of the country; this remains the basic criterion for project selection and appraisal. And second, that

while greater concern with the distributional effects of projects reflects broader objectives of development, it does not mean that the Bank has lowered its standards of appraisal. Whether "old" style or "new" every project must have a satisfactory economic return, a standard which we believe serves the best interests of both the country and the Bank.

Financial. Financial appraisal has several purposes. One is to ensure that there are sufficient funds to cover the costs of implementing the project. The Bank does not normally lend for all project costs; typically it finances the foreign exchange costs and expects the borrower or the government to meet some or all of the local costs. In addition, other co-financiers such as the European Development Fund, the several Arab funds, the regional development banks, bilateral aid agencies, and a growing number of commercial banks, join to an increasing extent in co-financing projects which, in many instances, are appraised and supervised by the Bank. Therefore, an important aspect of appraisal is to ensure that there is a financing plan which will make funds available to implement the project on schedule. When funds are to be provided by a government known to have difficulty in raising local revenues, special arrangements may be proposed, such as advance appropriations to a revolving fund or the earmarking of tax proceeds.

For a revenue-producing enterprise, financial appraisal is also concerned with its financial viability. Will it be able to meet all its financial obligations, including debt service to the Bank; will it have adequate working capital; will it be able to generate funds from internal resources to earn a reasonable return on its assets and make a satisfactory contribution to its future capital requirements? The finances of the enterprise are closely reviewed through projections of the balance sheet, income statement and cash flow. Where financial accounts are inadequate, a new accounting system may be established with technical assistance provided by the loan. Additional safeguards of financial integrity may include debt-equity ratios or limitations on additional long-term borrowing.

The financial review often highlights the need to adjust the level and structure of prices charged by the enterprise. Whether or not they are publicly owned, enterprises financed by the Bank generally provide basic services and come under close public scrutiny. Because the government wishes to subsidize such services to the consuming public as a matter of policy, or perhaps simply as the line of least resistance, it may be reluctant to approve the price increases necessary to ensure efficient use of the output of the enterprise and to meet its financial objectives. But adequate prices are a sine qua non of Bank lending to revenue-earning

enterprises, and the question of rate adjustments may be critical to the appraisal and subsequent implementation.

Financial appraisal is also concerned with recovering investment and operating costs from project beneficiaries. For an irrigation project, the Bank normally expects farmers to pay, over time and out of their increased production, all of the operating costs and at least a substantial part of the capital costs. Actual recovery in each case takes account of the income position of the beneficiaries, and of practical problems such as the difficulties of administering a particular system of charges or of levying higher charges on Bank-financed projects than are collected elsewhere. The Bank's policy, thus, tries to strike a balance between the need to use scarce resources efficiently, considerations of equity, and the need to generate additional funds to replicate the project to reach the larger numbers of potential beneficiaries. Costs can be recovered in a variety of ways — by charges for irrigated water, by general taxation, or by requiring farmers to sell their crops to a government marketing agency at controlled prices. Some countries have been applying lower standards of cost recovery than recommended by the Bank; thus, arriving at a common judgment on what is desirable and practicable can be one of the more difficult aspects of the appraisal and subsequent negotiation.

Similar issues arise in connection with the interest rates charged to sub-borrowers or ultimate beneficiaries when Bank funds are provided for industrial or agricultural credit. To ensure efficient use of scarce capital, the Bank believes that the interest charges to beneficiaries should generally reflect the opportunity cost of money in the economy. But interest rates are often subsidized, and the rate of inflation may even exceed the interest rate. In countries with rapid inflation, a system of indexed rates is sometimes followed. As in the case of cost recovery, the appropriate level of interest rates may be a contentious issue. The Bank may have to set its sights on a long-term goal, recognizing that it will take time to bring about what may be far-reaching changes in financial policy. This may be particularly so when the government is seeking to control interest rates and other prices as part of an anti-inflationary program.

The appraisal mission prepares a report which sets forth its findings and makes recommendations for the terms and conditions on the loan. This report is drafted and redrafted, and carefully reviewed, before the loan operation is approved by management for negotiation with the borrower. Because of the Bank's close involvement in identification and preparation, appraisal rarely results in rejection of a project; but it may have been extensively modified or redesigned during this

process to correct flaws which might otherwise have led to its rejection.

Negotiations and Board Presentation

Negotiations are the stage at which the Bank and the borrower endeavor to agree on the measures necessary to ensure the success of the project; these agreements are then converted into legal obligations, set out in the loan documents. We may have agreed with a public utility borrower that, in order to earn an adequate rate of return, and finance a reasonable proportion of its investments, prices must be increased by, say, 20% immediately and 10% in two years time.

A financial covenant, agreed upon during negotiations, will define the overall financial objectives and specify the necessary rate or return and the timing of the initial rate increase. If a new project unit must be set up to administer the project or to coordinate activities of the various ministries involved, the loan documents will specify when and how it is to be established and staffed. In fact, all of the principal issues that have been raised prior to and during appraisal are dealt with in the loan documents. Thus, the drafting and negotiation of the legal documents are an essential part of the process of ensuring that the borrower and the Bank are in agreement, not only on the broad objectives of the project but also on the specific actions necessary to achieve them and the detailed schedule for project implementation.

Negotiations are a process of give and take, on both sides of the table. The Bank, for its part, must learn to adapt its general policies to what can reasonably be accomplished in the particular setting of the project, sector, and country. The borrower, for its part, must recognize that the Bank's advice is generally based on professional expertise and worldwide experience, and that the Bank's requirement that its funds be invested wisely is compatible with the best interest of the project. Despite the differences that inevitably arise when difficult issues must be resolved, the relations that have developed over time between the Bank and its borrowers at this and other stages of the project cycle are generally very good. Bank staff have become more aware of and sensitive to local conditions which are critical to the successful outcome of a project. Borrowers have come to appreciate that the Bank's approach is professional and objective, that we are in business to lend for well-conceived and well-executed projects, and that this is, indeed, our only interest in project work.

After negotiations, the appraisal report, amended to reflect the agreements reached during negotiations, is presented to the Bank's Executive Directors, together with a President's Report and the loan documents. If the Executive Directors approve the operation, the loan is then

signed in a simple ceremony which marks the end of one stage of the cycle and the beginning of another.

After negotiations, the appraisal report, amended to reflect the agreements reached during negotiations, is presented to the Bank's Executive Directors, together with a President's Report and the loan documents. If the Executive Directors approve the operation, the loan is then signed in a simple ceremony which marks the end of one stage of the cycle and the beginning of another.

Implementation/Supervision

The next stage in the life of a project is its actual implementation over the period of construction and subsequent operation. Implementation is, of course, the responsibility of the borrower, with whatever assistance has been agreed upon with the Bank in such forms as organizational studies, training of staff, expatriate managers, or consultants to help supervise construction. The Bank's role is to supervise the project as it is implemented.

Supervision is the least glamorous part of project work, but it is in several respects the most important. Once the ceremony attendant upon loan signing is over, attention in the country shifts to new projects that are coming along; this attitude is understandable and it is reinforced by the fact that many months or years may elapse before the "old" project begins to yield tangible results. Nevertheless, it is obvious that no matter how well a project has been identified, prepared, and appraised, its development benefits are realized only when it has been properly executed. All projects face implementation problems, some of which cannot be identified in advance. These problems may stem from difficulties inherent in the development process, as well as from more specific causes such as changes in the economic and political situation, in project management, or even in the weather. As a result, although the development objectives of a project generally remain constant, its implementation path often varies from what was envisaged.

It is for these reasons that the Bank has decided that an adequate level of supervision should be the first priority in the assignment of project staff. In practice the resources devoted to supervision have increased substantially over the years, both absolutely and relative to other project tasks.

The Bank is required by its Articles of Agreement to make arrangements to "ensure that the proceeds of any loan are used only for the purposes for which the loan was granted." While this "inspector" or "watchdog" function has been and remains important, the main purpose of supervision is to help ensure that projects achieve their development objectives, and in particular to work with the borrowers to

identify and deal with problems that arise during implementation. Thus, supervision is primarily an exercise in collective problem solving, and as such is one of the most effective ways in which the Bank provides technical assistance to its member countries.

Over the years another objective of supervision has also emerged as central: gathering the accumulated experience to "feed back" into the design and preparation of future projects and into the improvement of policies and procedures. Monitoring and evaluation units are now frequently incorporated, particularly in the newer-style projects, to gather information for this purpose.

Supervision takes place in a variety of ways. During negotiations agreement will have been reached on a schedule of progress reports to be submitted by the borrower. These reports cover the physical execution of the project, its costs, the financial status of revenue-earning enterprises and information on the evolution of project benefits.

Progress reports are reviewed at headquarters. Problems that surface are dealt with by correspondence or in the course of the field missions which are sent to every project. The frequency of these missions is closely tailored to the complexity of the project, the status of its implementation, and the number and nature of problems encountered. In the periodic internal reviews of projects under supervision, currently numbering in excess of 1,300, some projects are classified in a special "problem" category. These projects, usually less than 10% of the total, are watched with particular care and may be visited three or four times a year. Methods have been developed to enhance the effectiveness of supervision work, such as greater reliance on field office staff to deal with urgent problems, and the use of country-level reviews with the government when problems arise across the whole spectrum of projects (for example, as a result of a financial crisis). An annual review of the supervision portfolio as a whole is made to identify major issues of implementation and recommend appropriate changes in Bank policies and procedures.

An important element of project supervision concerns procurement of goods and works financed under the loan. Procurement is carried out in accordance with guidelines, incorporated into every loan agreement, which are designed to ensure that the requisite goods and works are procured in the most efficient and economical manner. In most cases this objective can best be achieved through international competitive bidding open to qualified contractors or manufacturers from all of the Bank's member countries. To foster the development of local capabilities, a degree of preference is ac-

corded to domestic suppliers, and under certain conditions to domestic contractors. Local competitive bidding, or even construction by the borrower's own forces, may be more economic and efficient in some of the newer-style projects where the works are too small for international tendering to be appropriate. Seeing that the agreed procurement rules are observed in practice — and a single loan may involve anywhere from a few to several hundred individual contracts — is a time-consuming job and one that we take very seriously. Sometimes it is relatively straightforward and routine; on other occasions, it becomes a major issue, as, for example, in a telecommunications or power project when there may be a very close choice among several international suppliers as to which has made the lowest evaluated bid on a multimillion dollar contract. I should make it clear that the borrower, not the Bank, is responsible for preparing the specifications and tender documents and evaluating bids. The Bank's role is to make sure that the borrower's work is done properly and the guidelines observed, so that Bank funds may be disbursed for the contract. Any controversy concerning the proposed award is sure to be called promptly to the Bank's attention.

Evaluation

While supervision is in part a process of learning by experience, it is primarily concerned with that period in the project's life when physical components are being constructed, equipment purchased and installed, and new institutions, programs and policies put in place. Once these stages are complete, and Bank funds fully disbursed, the level of supervision declines sharply. During the period of active supervision, attention tends to be focused on the problems of the moment. While projects may be subject to on-going monitoring and evaluation, the need for a more comprehensive approach to evaluating project results has become apparent. Some eight years ago such an evaluation system was established as the most recent (and final) stage in the project cycle.

All Bank-financed projects are now subject to an *ex-post* audit. To ensure its independence and objectivity, this audit is the responsibility of an Operations Evaluation Department (OED) entirely separate from the operating staff of the Bank and reporting directly to the Executive Directors and the President through a Director General appointed by the Executive Directors. While this system ensures full accountability, it is also designed to mesh closely with and take advantage of the supervision, regular project staff prepare a completion report on each project at the end of the disbursement period. These reports are in part an exercise in self-evaluation — which has not prevented them from often being frank and

critical. Each report is reviewed by OED, which then prepares a separate audit report; both reports are usually sent to the Executive Directors. In most cases, the audit is based on a desk review of all materials pertaining to the project but, whenever necessary, the audit staff undertakes a field review, sometimes as comprehensive as the original appraisal. The borrower is asked to comment on the OED audit, and is now being requested to prepare its own completion report. Furthermore, the Bank is encouraging borrowers to establish evaluation systems to review all their development investments.

Each audit and completion report reestimates the economic rate of return on the basis of actual implementation costs and updated information on operating costs and expected benefits. They cannot, however, pass a final judgment on the success or failure of some projects, whose economic life, with the attendant operating costs and benefits, extends well beyond the end of the disbursement period. A system of further evaluation at an alter stage of project operation is under consideration to fill this gap.

In addition, an annual OED report reviews all project audits. More in-depth studies are made of groups of projects (e.g., all loans to development finance companies), special problems (e.g., delays in loan effectiveness), or a sector in a particular country (e.g. agriculture projects in Indonesia).

The evaluation system is providing a gold mine of information, supplementing and complementing that provided by the broader stream of project supervision reports. Some of the findings are sobering; many are reassuring. Experience indicates, for example, that we still have much to learn about the technologies necessary to bring about sustained increases in yields of small farmers in rainfed areas, most notably in Sub-Saharan Africa. Problems of cost overruns and delayed completion have plagued the implementation of a number of projects, particularly in the period following the oil price rises and ensuing worldwide inflation. Many projects have changed in scope during their implementation. Nevertheless, the most recent annual review of OED audits, comprising 109 projects, indicates that over 91% of the investments remain

worthwhile, a number of them with expected economic returns similar to or better than estimated at appraisal.

Particularly gratifying is the indication that the Bank's response to the lessons of experience is generally positive. Past mistakes, of which we have had our share, have not often been repeated. Subsequent projects in a sector have built on earlier ones. New approaches, policies and procedures have been adopted to improve project performance: for example the project brief system is helping to secure government agreement and commitment to project objectives at an earlier stage of project design; rural development projects now integrate the provision of all the services, inputs, and basic infrastructure necessary to bring about a sustained increase in small farmers' yields; lending at a more advanced stage of project preparation is being introduced to provide more accurate cost estimates and reduce the likelihood of cost overruns and implementation delays. The lessons of of experience are, thus, being built into the design and preparation of future projects. In other words, the project cycle is working as intended.

Warren C. Baum, a citizen of the United States, has been a member of the staff of the World Bank since 1959, having been both an economist and a loan officer in the European Department before becoming the Chief of the then Transportation Division of the Projects Department. He subsequently served as Deputy Director of that Department and is now Associate Director, Projects. He was educated at Columbia University and Harvard University and received a Ph.D. in economics from the latter institution in 1949. Mr. Baum is the author of *The French Economy and the State* and several articles.