PD HAB 947

REPUBLIQUE TUNISIENNE

Ministère de l'Agriculture

OFFICE DE DEVELOPPEMENT DE LA TUNISIE CENTRALE

Projet de Développement Rural de la Tunisie Centrale
No. 664-0312

Sous-Projet De Développement Zonal
No. 664-0312.1

FONDS EXPERIMENTAL

EVALUATION A MI-TERME

(24 Avril - 25 Mai 1984)

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I. Préambule

Conformément à l'accord de prêt et de don No. 664-0312.1 signé le 19 mai 1979 entre le Gouvernement Tunisien d'une part et la Mission Américaine de Coopération Economique et Technique en Tunisie (USAID) d'autre part et la Lettre d'Exécution No. A-3 du 27 mai 1981 relative à l'utilisation du Fonds Expérimental du sous-projet de Développement Zonal, une mission d'évaluation a été conjointement constituée par les représentants de l'Office de Développement de la Tunisie Centrale (ODTC), du Ministère du Plan, du Commissariat Général de Développement Régional (CGDR) et de l'USAID afin de procéder à l'évaluation des actions menées par ledit Fonds depuis sa mise en oeuvre en 1981.
L'objet principal de cette première évaluation (selon la Lettre d'Exécution) est de vérifier le degré de conformité des actions entreprises dans le cadre du Fonds avec les critères définis dans la Lettre d'Exécution précitée; cependant, les termes de référence (annexe No. 1) préparés par l'ODTC placent l'évaluation dans un cadre plus global en lui demandant de:
--apprécier les critères établis en 1981, et de
--déterminer si le Fonds Expérimental est un moyen efficace pour encourager les technologies spécifiques et appropriées à la région.

Pour ce faire, l'ODTC a entrepris les démarches nécessaires et a élaboré un programme de travail détaillé. Cette évaluation a été confiée à l'équipe suivante:

-Monsieur Bechir NAIJA = Ministère du Plan, Tunis
-Monsieur Mounir BOURAOUI = CGDR, Tunis
-Mademoiselle Dorothy YOUNG = USAID/Tunis
-Monsieur Chedli ZARG EL AYOUN = USAID/Tunis
-Monsieur Bechir KHELIFI = ODTC, Kasserine
-Monsieur Hattab BEN CHAABANE = ODTC, Kasserine
Le Ministère de l'Agriculture, n'a pas été représenté.

L'équipe a procédé de la façon suivante:
1) Etude de la documentation disponible, relative au Fonds Expérimental et préparation des questionnaires (annexe No. 2); (23 Avril 1984)
2) Entretiens avec les cadres de l'ODTC; (24 & 25 Avril 1984)
3) Contacts avec les autorités locales et les organismes intervenant dans le Fonds Expérimental; (24 & 25 Avril 1984)
4) Enquête sur le terrain auprès de quelques bénéficiaires; (24 & 25 Avril 1984)
5) Echange des observations entre les membres de l'équipe et rédaction conjointe du rapport; (26 Avril 1984 - 10 Mai 1984)
6) Consultation avec les organismes interessés sur le projet de rapport d'évaluation; (15 au 18 Mai 1984)
7) Redaction finale du rapport; (21 au 25 Mai 1984).

II. Contexte et Concept du Fonds Expérimental

Le Fonds Expérimental est une composante du sous-projet de Développement Zonal destiné à améliorer l'identification, la planification, la conception, l'exécution et l'évaluation des projets par l'ODTC. Il constitue un moyen pour l'expérimentation de projets pilotes introduisant de nouvelles technologies et méthodes d'organisation afin d'identifier des modèles d'intervention adaptés à la région de la Tunisie Centrale.

Les projets devant être financés par le Fonds Expérimental doivent répondre aux critères déterminés dans la Lettre d'Exécution à savoir:

-des critères essentiels comme:
--L'innovation (introduction de nouvelles technologies, de nouvelles formes d'organisation...)
--echelle réduite et potentiel élevé de multiplication,
--avantages raisonnables escomptés,
--avantages escomptés pour les familles à faible revenu; et

-des critères secondaires souhaités comme:
--Les créations d'emplois
--La participation locale
--L'utilisation des matériaux locaux.

Le montant initialement alloué au Fonds Expérimental en 1979 était de 5,6 million de US $ dont 50% à la charge de l'USAID. Cette enveloppe a été ramenée à 3 millions US $ en 1981, avec le même taux de participation de l'USAID.

La gestion du Fonds est assurée par la Direction de la Planification et de l'Evaluation (DPE) de l'ODTC. Un Service a été créé au sein de la DPE afin de mener à bien toutes les phases de préparation et de réalisation des actions du Fonds.

Le Service du Fonds Experimental est constitué par un chef de service (economiste), un consultant étranger contractuel (gestionnaire) et un ingénieur-adjoint (documentaliste agricole).

III. Identification, Elaboration et Approbation des projets du Fonds Experimental

A. La procédure d'identification:

La procédure d'identification a consisté essentiellement à:
-- rechercher des promoteurs éventuels parmi les différents ministères

techniques, les organisations non-gouvernementales (Association de Développement et d'Animation Rurale -ASDEAR, Fondation pour le Développement Communautaire -FDC, Institut Tunisien de Technologie Appropriée -ITTA), les centres de recherche ainsi que les organismes privés, et
-- identifier des idées de projets pouvant être financées dans le cadre du Fonds Experimental.

Cette démarche a été entreprise sous les deux formes suivantes:
-- par correspondance: l'ODTC a assuré une large diffusion des critères auprès d'au moins une cinquantaine d'organismes:
-- par des contacts directs: les Chefs de Service successifs du Fonds Experimental ont entretenu un contact permanent avec ces organismes.
Cet effort d'identification ne semble pas avoir atteint les résultats escomptés puisque seul un nombre restreint d'organismes a répondu favorablement à cette démarche.

B. L'élaboration des projets:

Une fois les idées de projets recensées, l'élaboration des dossiers y afférent est généralement entreprise par l'organisme promoteur selon le schéma établi par le service du Fonds Experimental; ce dernier collabore éventuellement avec ces organismes, sinon élabore directement les dossiers requis. Les projets ainsi élaborés sont soumis pour approbation.

C. L'approbation:

L'approbation des projets se fait à deux niveaux ODTC et Ministère du Plan.

1. Au niveau de l'ODTC:

Un comité d'approbation composé de huit à dix membres représentant d'une part l'ODTC et d'autre part les organismes concernés par les projets. Ce comité est présidé par le PDG de l'ODTC ou son représentant. Ses réunions ne sont pas périodiques mais en fonction du nombre de projets soumis pour approbation. Cependant même si le comité ne se réunit pas fréquemment (trois fois), les projets sont toujours examinés et analysés par les responsables techniques de l'ODTC avant leur soumission au Plan.
-Création du Comité : Décembre 1981
-Trois (3) réunions organisées.
-Dernière réunion du comité : 5/01/1983.
Désormais les projets sont approuvés uniquement au sein de la DPE sans passer par ce comité.

2. Au niveau du Ministère du Plan

Les projets approuvés par le comité (ou plus tard par la DPE) sont transmis directement au Ministère du Plan. La transmission des projets ne se fait pas au début de chaque année budgétaire en raison des difficultés d'identification et de constitution d'une banque de projets. L'approbation par le Ministère du Plan se fait au fur et à mesure de la présentation des projets par l'ODTC.

Il y a lieu de mentionner certains rejets de projets par le Ministère du Plan, dûs essentiellement à l'interprétation restrictive du critère innovation. Ce critère est appliqué par le Ministère du Plan en le situant au niveau national uniquement (cas des projets Unité Réduite de Transformation des Fruits et Légumes; Electrification et Chauffage par Energie Solaire). D'autre part, le Ministère du Plan n'a pas accepté les projets où la composante frais d'étude est importante (supérieure à 10% du coût du projet).

D'autres projets ont été rejetés pour interprétation limitée du critère échelle réduite (cas des projets Participation Populaire Eau Potable et Assainissement; Fabrication de Petit Matériel Agricole à Traction Animale Adapté à la Région).

IV. Contenu des projets et leur conformité aux critères d'utilisation

Les projets approuvés dans le cadre du Fonds Expérimental au 31 Décembre 1983 peuvent être groupés en deux catégories principales :

-- Deux projets intégrés à Jilma et El Ayoun.

-- Neuf projets ponctuels faisant appel à des technologies diverses (énergies nouvelles, matériaux locaux de construction, santé mobile, participation communautaire).

Il s'agit de petits projets dont le coût global (200.000 Dinars) ne représente que 10% du montant alloué au Fonds depuis 1981.

Le coût moyen par projet est de 18.000 Dinars, alors qu'il etait initialement estimé à 100.000 Dinars.

Les projets réalisés ou en cours de réalisation sont globalement conformes aux critères essentiels. Par ailleurs, ces projets ont contribué à l'introduction de l'approche participative de la communauté bénéficiaire dans la réalisation des projets de développement et à l'utilisation des materiaux locaux disponibles.

Toutefois, pour les critères secondaires souhaités, ces projets n'ont pas contribué à la création d'emplois escomptée.

NOM DU PROJET	CONFORMITE AVEC CRITERES ESSENTIELS			CRITERES SECONDAIRES				OBSERVATION
	Innovation	Echelle Réduite	Avantages Raisonnables escomptés	Avantage escompté pour familles à faible revenu	Creation d'emploi	Participation locale	Utilisation matériaux locaux	
1) Jilma	oui	oui	oui	oui	partiel	oui	partiel	achevé
2) Gaz Méthane	oui	oui	oui	non	non	partiel	partiel	abandonné
3) Toilettes Rurales	oui	oui	oui	oui	non	oui	oui	achevé
4) Eoliennes	oui	oui	oui	oui	non	non	non	en cours
5) El Ayoun	oui	oui	oui	oui	partiel	oui	partiel	en cours
6) Const.matériaux locaux (const.batiment admn.)	oui	oui	oui	non	non	non	oui	en cours
7) Eau Potable avec participat.communautaire	oui	oui	oui	oui	non	oui	partiel	en cours
8) Equipe Mobile Soins Santé de Base	oui	oui	oui	oui	non	non	non	en cours
9) Auto-construction habitat	oui	oui	oui	oui	non	oui	partiel	en cours
10) Apiculture Mgilla	oui	oui	oui	oui	non	oui	non	en cours
11) Piste à la Margine	oui	oui	oui	oui	non	non	oui	en cours

V.Exécution, état d'avancement et suivi des projets

L'ODTC qui est responsable de la gestion générale du Fonds Expérimental, de la sélection des projets, n'est pas appelé selon la Lettre d'Exécution à concevoir les projets ou à les exécuter. Il est encouragé à faire appel à d'autres organismes pour la mise au point et l'exécution des projets pilotes. Le rôle de l'ODTC est d'étudier, d'approuver les projets proposés, de suivre leur mise en exécution et enfin d'évaluer les résultats des projets terminés afin d'en faire multiplier ceux qui sont réussis. Une fois le projet approuvé, une convention définissant les rôles et responsabilités de l'ODTC et de l'organisme promoteur est établie d'un commun accord en vue de mener à bien l'éxécution du projet. Sur les onze projets approuvés, huit sont conçus et exécutés par d'autres organismes (Affaires Sociales, Santé Publique, Equipement, FDC, ASDEAR, l'Office de Mise en Valeur de Sidi Bou Zid).

Cependant, pour les deux projets integrés de Jilma et El Ayoun et en raison de la complexité de la réalisation de tels projets, l'ODTC a été amené à jouer un rôle prépondérant dans leur exécution, coordination et leur suivi.

Pour le troisième projet (d'auto-construction) l'ODTC a l'intention de l'exécuter, car le promoteur initial s'est désisté après la soumission et l'approbation du projet.

L'exécution des projets a fait intervenir la participation des bénéficiaires (main d'oeuvre non qualifiée et apport de materiaux locaux), des Autorités Locales (transport des materiaux et maçons qualifiés) ainsi que d'autres organismes (animation et encadrement).

Malgré les changements successifs du personnel du Fonds Experimental et son nombre restreint, l'encadrement et le suivi des projets est jugé louable. Cependant, un effort supplèmentaire doit être consenti dans ce domaine afin d'accélérer le rythme d'exécution et la consommation des crédits. Il est à noter que seulement deux projets sont entièrement achevés, sept en cours d'exécution, un projet n'ayant pas démarré et un projet sera abandonné pour des considérations techniques.

Cette lenteur d'exécution est confirmée par le faible pourcentage (33%) de consommati... des crédits alloués au projet approuvés et environ 4% de l'enveloppe globale des crédits alloués au Fonds Expérimental.

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D'après les informations recueillies, les difficultés rencontrées dans la réalisation des projets prévus peuvent être classées en trois catégories principales :

1. Les causes inhèrentes à l'ODTC:
   --Manque de personnel chargé du suivi et des moyens logistiques (surtout transport) mis à sa disposition.
   --Insuffisante implication des cadres de l'ODTC surtout au niveau de l'administration centrale dans les différentes phases de la réalisation des projets.
2. Les causes inhérentes aux opérateurs:
   --Personnel et moyens réduits.
   --Préparation insuffisante et incomplète des projets (sous-estimation du coût des projets).
   --Communication insuffisante avec l'ODTC.
3. Autres causes:
   --Fréquentes penuries des matériaux de construction.
   --Non disponibilité totale des bénéficiaires qui sont parfois occupés par des activités agricoles saisonnières.
   --Dispersion de la population bénéficiaire.

VI. Impact des projets du Fonds Expérimental.

Impact au niveau de l'Office

L'objectif principal du Fonds Expérimental est d'aider l'ODTC à améliorer l'identification, la planification, la conception, l'exécution et l'évaluation des projets.
Il semble, d'après l'examen de ce qui se réalise au sein de la DPE, que l'on tend vers la réalisation de cet objectif. L'identification des projets a démarré très lentement, la nature et les critères du Fonds Experimental rendaient toute mission d'identification difficile.
Actuellement le Service du Fonds Experimental a identifié pas moins que cinq projets nouveaux pour l'année 1984 pour un coût global de 300.000 dinars. D'autres projets sont en gestation pour l'année 1985. Cependant, d'autres efforts restent à faire en ce qui concerne le suivi de la réalistion des projets.

Impact au niveau de la population

Les projets financés dans le cadre du Fonds Experimental ont manifestement un impact positif au niveau de la population. Cet effet est démontré aussi bien par l'augmentation du revenu et l'amélioration des conditions de vie que par le changement de la mentalité des communautés bénéficiaires.

Il ressort des visites effectuées sur le terrain, des discussions avec les autorités régionales et quelques bénéficiaires, ainsi que l'analyse de l'évaluation faite par le service du Fonds Experimental de l'ODTC, que les dits bénéficiaires ont eu une augmentation sensible de leur revenu. Les projets de Jilma et El Ayoun prévoyaient une augmentation moyenne de revenu par famille de l'ordre de 600 dinars par an. Cependant, la composante petit élevage (aviculture) a totalement échoué. Selon les

autorités locales, le choix de la race (type industriel) ainsi que le moment de la distribution (Ramadan et grandes chaleurs) n'étaient pas appropriés. Ce qui fait que l'augmentation de revenu s'est limitée uniquement à 350 dinars par an et par famille; ce qui est jugé appréciable puisque le revenu acquis permet à la fois de consolider l'emploi et de maintenir la population dans son milieu.
La courte expérience du Fonds Experimental n'a pas permis d'évaluer les possibilités de multiplication et d'adoption des pratiques du Fonds par les autres institutions et organismes intervenant dans la région. Mais force est de constater que le Programme de Développement Rural (PDR), dans le Gouvernement de Kasserine (Délégation d'El Ayoun) pour les projets concernant l'amélioration de l'habitat a orienté ses actions vers la méthode qui est introduite dans la zone par le Fonds Expérimental. Cependant, il est hazardeux de soutenir que l'expérience du Fonds Expérimental dans le domaine de l'auto-construction a fait tâche d'huile.

Par ailleurs le projet Eoliennes, s'il n'a pas apporté un revenu supplémentaire pour la communauté bénéficiaire, a tout de même réduit le coût d'exploitation concernant le pompage de l'eau. Actuellement, la technologie Energie Eolienne n'est pas maitrisée par la population cible. Cependant la plupart des gens et surtout les élèves de l'école d'El Haria sont sensibilisés aux problèmes de la technologie et de la maitrise energétique.

Au niveau de l'amélioration de la condition de vie, on a pu constater que 90% des bénéficiaires de l'auto construction de Jilma et d'El Ayoun vivent dans des meilleures conditions d'habitat et d'hygiène. Ceci est de nature à rassurer l'agriculteur sur sa famille qui devient mieux abritée et à lui permettre de se consacrer davantage aux travaux des champs. L'aspect le plus positif remarqué dans les deux projets, est que la population ne se considère pas comme un objet de développement, mais plutôt comme un sujet. Effectivement, les projets ont contribué à changer la mentalité d'assistés qu'avaient les bénéficiaires des actions du Fonds Experimental et à les rendre des véritables producteurs pouvant compter sur eux-mêmes pour améliorer leurs conditions matérielles.

VII. Conclusions

Avant de conclure, il est à rappeler que le Fonds Expérimental a été conçu avant que l'ODTC ne devienne opérationnel comme un outil de recherche appliquée pour le développement des zones déshéritées de la Tunisie Centrale. A ce titre il est unique et innovatif donc difficile à mettre en oeuvre. Ceci explique en partie les deux années requises, après la signature de l'accord en Mai 1979 pour que toutes les parties conviennent sur des critères d'utilisation essentiels et secondaires.

L'équipe d'évaluation a constaté que le vrai démarrage de l'éxecution du Fonds Expérimental n'a été qu'en 1982 et pense que l'évaluation n'a couvert que la période de démarrage. En raison du fait que l'évaluation rétrospective du Fonds Expérimental intervient à mi-chemin de la période prévue pour sa mise en oeuvre (mi-81 - mi-86) et étant donné que le coût de l'ensemble des projets ayant fait l'objet de la présente évaluation ne représente que 10% de l'enveloppe financière réservée à ce programme, les membres de l'équipe d'évaluation estiment qu'il est prématuré de tirer des conclusions définitives le concernant.
Comme doit être le cas pour tout programme nouveau, l'équipe d'évaluation a essayé de dégager avec le maximum d'objectivité possible les forces et les faiblesses des actions du Fonds Expérimental.

En ce qui concerne les forces de ce programme, l'équipe enregistre avec satisfaction l'impact très positif qu'ont eu les projets jusqu'ici réalisés sur la population démunie des zones d'intervention de l'ODTC. En effet les visites de l'équipe sur le terrain lui ont permis de constater de visu l'amélioration des revenus et des conditions de vie des familles pauvres aidées dans le cadre des deux projets intégrés réalisés dans les délégations de Jilma et d'El Ayoun.

D'autre part, la participation communautaire à la réalisation de tous les projets a été partout constatée.

Les populations qui ont ou vont profiter de la réalisation des projets du Fonds Experimental soit à titre individuel (auto-construction, distribution d'ovins, d'aviculture, toilette rurale) soit à titre collectif (alimentation en eau potable, santé de base) ainsi que les autorités locales contactées ont demandé la multiplication de tels projets pour que d'autres familles et communautés en profitent et ont aussi exprimé le souhait de voir les projets dont elles ont bénéficiés complétés par la réalisation d'autres actions complémentaires (agriculture, cuniculture, projets productifs non agricoles, création de points d'eau, de pistes et de centres de santé de base) afin de rendre les interventions du Fonds Experimental plus intégrées entre elles.

D'autre part, il a été bien constaté dans la réalisation des projets (notamment dans les projets d'auto-construction) que la région est bien déterminée à utiliser au maximum les ressources naturelles (eau, matériaux locaux de construction) dont elle dispose.

Ainsi on peut dire sans risque d'erreur que les projets réalisés ou en cours de réalisation répondent bien aux besoins économiques et sociaux de la région.

En outre, ces projets sont conformes à presque tous les critères d'utilisation du Fonds, chose qui montre que son objectif visant à "installer au sein de l'ODTC les moyens techniques nécessaires à une planification et à une évaluation des activités de développement de la région" est en bonne voie de réalisation.

Cependant, les projets du Fonds Expérimental gagnent à être mieux préparés et mieux suivis par la DPE afin de réaliser tous les objectifs du Fonds et surmonter les difficultés qu'a rencontrées jusqu'ici sa mise en oeuvre.

Les faiblesses du Fonds Expérimental sont apparues aussi bien au niveau de la préparation des projets qu'au niveau de leur réalisation.

Au niveau de la préparation, les projets ont souffert des insuffisances suivantes:

-- Faible taille des projets identifiés. Ceci est dû à une mauvaise interprétation de la part des décideurs du critère échelle réduite, ce qui abouti à un faible taux de programmation de l'enveloppe réservée au Fonds.

-- L'artisanat et la petite industrie ne sont pas encore touchés par les interventions du Fonds, ceci est dû à l'interprétation très restrictive du critère innovation par les décideurs qui n'ont retenu que les projets qui constituent une innovation au niveau national.

-- Les projets identifiés et réalisés manquent d'intégration et gagnent à être complétés par d'autres projets ou composantes de projets afin de mieux satisfaire les besoins de la population.

-- Les coûts prévus pour certains projets ou composantes de projets sont sous-estimés, chose parfois qui a laissé inachevées certaines réalisations.

-- Les projets mettent beaucoup de temps pour être prêts à la réalisation (identification, étude, approbation).

Au niveau de la réalisation des projets il faut mentionner les insuffisances suivantes:

-- Un temps très important est mis entre l'approbation du projet et sa mise en exécution.

-- La réalisation des projets est très lente puisque le taux de consommation des crédits réservés aux projets engagés n'a été que d'environ un tiers.

--Vu le nombre restreint des opérateurs qui se sont portés volontaires, leurs capacités n'ont pas été toujours judicieusement analysées puisque la plupart d'entre eux ne semblent pas disposer de capacités suffisantes de préparation et de réalisation des projets (préparation insuffisante des dossiers et manque de moyens matériel et humain mis au service du projet).

-- Inexistence de planning détaillé de réalisation de chaque composante du projet convenu d'un commun accord entre l'ODTC et l'Opérateur.

-- Manque de suivi sur le terrain par l'ODTC.

L'équipe d'évaluation demeure convaincue que les insuffisances qu'elle a relevées ne sont que passagères et peuvent être surmontées si les recommandations ci-après sont bien appliquées.

VIII. Recommandations

1. Vulgarisation du Fonds Expérimental: traduire les textes sur les critères et les objectifs du Fonds en arabe et les diffuser largement surtout au niveau des autorités régionales et locales (gouvernorats, délégations et cheikhats) services régionaux et locaux de l'état y compris les subdivisionnaires de l'ODTC.

2. Intensifier les contacts avec tous les ministères techniques, les centres de recherches et centres universitaires afin de recueillir le maximum d'idées de projets innovatifs.

3. Impliquer tous les cadres de l'ODTC dans l'identification, l'élaboration, la réalisation et le suivi des projets, lesquels cadres sont aussi invité à faire intervenir leur correspondant au sein des ministères techniques.

4. Transformer le comité d'approbation existant en un comité permanent de reflexion, d'approbation et de suivi du Fonds Expérimental. Il est suggéré que ce comité soit presidé par le PDG de l'ODTC qui l'élargira à d'autres personnes représentant les services régionaux concernés et qui veillera à ce que ce comité se réunisse d'une manière plus régulière.

5. Afin d'aider à la préparation et au choix des projets, d'accélerer leur approbation au niveau national et d'harmoniser l'interprétation des critères du Fonds nous suggérons que le représentant du Ministère du Plan (Direction du Budget d'Equipement) soit membre permanent du comité précité.

6. Renforcer le service Fonds Expérimental de l'ODTC en moyens matériels (transport) et humain avec unes équipe multidisciplinaire; à ce sujet l'ODTC peut affecter à temps partiel certains de ses cadres existants au service du Fonds Expérimental).

7. En vue d'assurer la réalisation de l'objectif de multiplication des projets pilotes réussis, nous recommandons à l'ODTC de développer un système d'analyse des projets achevés et de diffusion des résultats positifs atteints.

8 Réaliser des projets dans les délégations non encore touchées par le Fonds Expérimental.

9. Intensifier les efforts en vue d'identifier les projets créateurs d'emplois (surtout non agricoles).

10. Veiller à ce que les projets retenus dans le cadre du Fonds Expérimental s'intègrent avec d'autres interventions de développement ou s'apprêtent à une intégration ultérieure envisagée (à ce sujet les représentants contactés du Ministère du Plan ont demandé que le Fonds Expérimental intervienne dans le financement des projets PDRI qui sont des projets innovatifs dans le développement rural.)

11. Veiller à l'établissement d'un calendrier détaillé de réalisation et d'un tableau de bord pour chaque projet.

ANNEXE 1

TERMES DE REFERENCE DE L'EVALUATION DU PROJET FONDS EXPERIMENTAL

(Préparé par l'ODTC)

INTRODUCTION

Une évaluation approfondie est proposée pour le Fonds Expérimental qui a démarré en Mai 1981 suite à la Lettre d'Exécution No. A-3 qui a défini les principes à suivre pour la gestion du Fonds et les critères auxquels les projets doivent répondre pour être éligibles au financement par le Fonds Expérimental. Ces termes ont été convenus lors des réunions entre l'Office de Développement de la Tunisie Centrale (ODTC), le Ministère du Plan, le Ministère de l'Agriculture et l'USAID en Février et Mai 1981.

Le Fonds Expérimental consiste en un Fonds géré par l'ODTC pour couvrir les coûts directs des Projets Pilotes dans les 12 Délégations de la zone d'intervention à savoir:

Kasserine

Sbeitla, Sbiba, Jedliane, El Ayoun, Haidra, Foussana, Thala.

Siliana

Kesra, Makthar, Rohia.

Sidi Bou Zid

Jilma, Sebbala.

Les actions proposées par les organismes doivent répondre aux critères et doivent passer par un comité d'approbation interne avant d'être soumises au Ministère du Plan.

A présent, il y a 11 projets expérimentaux à des étapes diverses d'éxécution. Il s'agit d'une gamme de projets qui touchent des domaines variés tel que la Santé, l'Agriculture, l'Amélioration de l'Habitat et l'Eau Potable dans plusieurs secteurs.

Historique

Le service Fonds Expérimental est sous la Direction de Planification et de l'Evaluation à l'Office de Développement de la Tunisie Centrale qui a été créé suite à un Accord de Prêt et de Don entre la République Tunisienne et les Etats-Unis d'Amérique en 1979. L'ODTC a comme but global la promotion de développement socio-économique et l'amélioration des conditions de vie de la population rurale dans la région de la Tunisie Centrale. Dans l'ensemble des activités, le Fonds Expérimental est un volet du Sous-projet de Développement Zonal portant l'expérimentation afin d'identifier des modèles d'intervention adaptés aux conditions de la région.

Ces activités viseront à:

-Améliorer l'accès aux infrastructures de base et aux service publics dans la région, ainsi que leur efficacité.

-Améliorer l'utilisation et la gestion des ressources naturelles de la région.

-Stimuler l'investissement privé et l'emploi non agricole dans la région de la Tunisie Centrale (voir Accord de Prêt et de Don pour le Projet AID 664-0312, Mai 1979).

"Réalisation d'une plus grande conformité aux nouvelles priorités d'investissement (à la suite d'amélioration de la planification, de l'analyse et de l'évaluation) dans l'utilisation des fonds de développement rural (Ministère du Plan) vers la fin de l'exercise ()/

Objectifs

La présente évaluation a pour objectifs de:

-Déterminer si les projets en cours d'exécution sont conformes aux critères et conventions.

-Déterminer si le volet "fonds expérimental" est un moyen efficace pour encourager des technologies spécifiées et appropriées à la région.

-Examiner les directives (critères, convention, gestion) afin de recommander des améliorations.

ANNEXE 2 (A)

QUESTIONNAIRE AUPRES DES ORGANISMES PROMOTEURS/CADRES ODTC

1. Que pensez-vous des critères du Fonds Expérimental?
   Recommandations

2) Que pensez-vous de la convention ODTC-promoteur?
   Recommandations

3) Comment jugez vous votre coopération avec les promoteurs/avec O.D.T.C.dans la réalisation des projets du Fonds Expérimental?
   Recommandations

4) Quels problèmes rencontrez-vous dans l'exécution des projets?

   a. élaboration de projets
   b. retards
   c. suivi
   d. financement
   e. communauté
   f. autorités locales

5) Qu'elles sont les résultats/impacts positifs ou négatifs du projet Fonds Expérimental, du point de vue:
   -technologie appropriée
   participation
   revenu
   amélioration conditions de vie (lesquelles)

6) Que pensez-vous de la méthode d'approbation (délai et précisions sur timing)
   interne à l'ODTC
   Ministère du Plan

ANNEXE 2 (B)

QUESTIONNAIRE AUPRES DES DELEGUES/REPRESENTANTS D'INSTITUTIONS REGIONALES
FONDS EXPERIMENTAL

1) Etes-vous au courant du Fonds Expérimental et connaissez-vous ses critères?

si oui, qu'en pensez-vous?
rigide?
souple?
réalisable?
à modifier?

2) Qu'elles sont les projets financés et exécutés dans le cadre du Fonds Expérimental dans votre délégation/gov.?

a. Qu'en attendiez-vous?
b. Les résultats actuels?
c. En quoi ces projets étaient-ils innovateurs par rapport au projets existants/similaires?

3) Ce genre de projet, pourrait-il être reproduit?

a. dans les mêmes conditions (mêmes critères)?
b. dans d'autres conditions (critères modifiés)? quelles modifications suggerez-vous?

4) Pourriez-vous identifier des nouveaux projets appropriés aux conditions de votre région (conformes les critères de Fonds Expérimental?)

a. si oui, lesquels? et comment concevez-vous leur réalisation? (p.e. coordination avec autres intitutions)
b. si non, pourquoi?

5) Selon vous, quelle était l'impact des projets en cours ou achevés auprès des

a. bénéficiaires
b. le reste de la communauté?

6) vos recommandations pour un meilleur utilisation du Fonds Exp.?

ANNEXE 3

PERSONNES CONTACTEES

-Monsieur Houcine EL JARII: Délégué d' El Ayoun
-Monsieur Habib MILI: Délégué de Jilma
-Monsieur Mongi GACHEM: Directeur de l'hopital régional, Kasserine
-Monsieur Slaheddine MALOUCHE: Directeur Régional du Ministère de l'Equipement, Kasserine
-Monsieur Abdelaziz TLILI: Directeur Régional des Affaires Sociales, Kasserine
-Monsieur Abdellatif BEDHIAFI: Représentant Régional de l'API, Kasserine
-Monsieur Mondher NEJI: F.D.C. Kasserine
-Monsieur Mohamed SAKRI: Directeur, DPE de l'ODTC, Kasserine
-Monsieur Mokdad MISSAOUI: DPE de l'ODTC, Kasserine
-Madame M'Della BOUAZIZI: Chef du Service du Fonds Expérimental, DPE de l'ODTC, Kasserine
-Madame Alyce NEJI: F.E. de l'ODTC, Kasserine
-Monsieur BOUBAKRI: F.E. de l'ODTC, Kasserine
-Monsieur Mohamed Salah EL HANI: Directeur Régional de l'ODTC, Rohia
-Monsieur Ali BEN AMOR: ASDEAR Rohia
-Réunion Générale avec le PDG de l'ODTC, Mr. Ahmed Ridha EL FEKIH
-Monsieur Rachid BOUGATEF, Ministère du Plan, Tunis (ex PDG de l'ODTC)
-Monsieur Abdessatar BEL HADJ TAIEB, Ministère du Plan (Direction du Budget Equipement), Tunis

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ANNEXE 4

FONDS EXPERIMENTAL PROJECT INTEGRE JILMA
TABLEAU RECAPITULATIF (OVINS)
EVALUATION DU 27/3/84
(Préparé par l'ODTC)

No. d'ordre	Noms et Prénoms	Effectif Initial	Effectif Supplémentaire actuel	Mort... ou vente
1	Lazhar B. Ahmed Abdi	7	9	1
2	Ali B. Mustapha Hasni	7	13	1
3	Lazhar B. Ali Saâd	7	6	1
4	Hedi Mokhtar Selmi	7	7	1
5	Ammar B. Youssef	7	8	-
6	Hiddi Veuve de Ahmed	7	9	2
7	Ali Essalah Belgacem S	7	10	3
8	Abdelaziz B. Sgaier	7	12	4
9	Abdellah Ammar Mansour	7	9	3
10	Saâd B. M'barek Zribi	7	7	5
11	Othman B. M'barek	7	6	6
12	Ali B. Amor M'hamdi	7	4	6
13	Amor B. Ahmed	7	9	4
14	Ahmed Mohamed Messaoud	7	9	3
15	Lamine B. Ammar	7	5	-
16	Salem B. Mohamed	7	11	2
17	Abdelkrim Khachnaoui	7	9	3
18	Mohamed B. Brahim	7	10	2
19	Amor B. Ahmed Mahmoudi	7	12	2
20	Taieb B. Mohamed Samali	7	10	1
21	Salah B. Mohamed B. Abid	7	12	2
		147	187	52
			239	

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ANNEXE 5

ETAT RECAPITULATIF SUR L'AVANCEMENT DES PROJETS (82-83)
(Préparé par l'ODTC)

Titre	Date d'approbation par le Plan	Coût	Nombre de Bénéficiaires	Description du Projet	% d'exécution
1. Eoliennes pour Alimentation en eau	11 juin 1982	8.000,000	4 écoles (1 Eol./ 150 élèves	Ce projet expérimental vise à assurer l'alimentation en eau potable à partir de puits de surface par des éoliennes qui seront entièrement réalisées en Tunisie.	25% (1 éolienne sur 4 a été réalisée)
2. Toilettes rurales	11 juin 1982	5.000,000	15	Ce projet vise l'installation de 15 toilettes rurales dans des zones éloignées qui ne disposent ni de cabinets de toilettes ni de l'eau courante.	100%

3. Gaz methane	11 juin 1982	4.500,000	3	Ce projet prévoit la création de 3 unités de gaz methane qui est produit par la fermentation et la décomposition du fumier animal afin d'utiliser ce gaz comme moyen de chauffage ou combustible.	0% ABANDONNE
4. Projet de Dévelop. intégré à Jilma	11 juin 1982	34.700,000	30	Ce projet touche 30 familles nécessiteuses et est composé des actions suivantes: (A) L'élevage: chaque famille a bénéficié de 7 brebis (antenaises ou/et accompagnées) afin de leur assurer un moyen de revenu à long terme. (B) L'auto-construction habitat: chaque bénéficiaire a reçu le nécessaire en en matériaux de construction d'une maison de dimensions 6 mètres de long sur 4 mètres de large. Le bénéficiare contribue par la main d'oeuvre.	100% passé à Sidi Bou Zid

5. Projet de développement intégré à El Ayoun	11 juin 1982	34.700,000	48	Ce projet intégré d'El Ayoun a été conçu pour atteindre les mêmes objectifs et plan d'exécution que le projet de Jilma, mais suivant les augmentations de prix on a dû réduire le nombre de bénéficiaires pour la composante auto-construction et éliminer la composante de poules pondeuses.	100%
6. Apiculture à Mguilla	31 mai 1983	18.600,000	30 familles	Ce projet se propose à réanimer l'action d'apiculture dans le secteur de Mguilla ou l'élevage a disparu suite à l'hiver glacial de 1981. Les objectifs sont: -Mettre en place le système d'élevage traditionnel avec quelques adaptations modernes. -Former les 30 bénéficiaires dans les nouvelles techniques. -Augmenter le revenu familial par la production du miel qui est fort demandé sur le marché.	20%

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Auto-construction habitat	31 mai 1983	30.000,000	22 familles 10 Rohia 13 Jedliane	Ce projet propose l'auto-construction dont les bénéficiaires apportent la main d'oeuvre et le projet fournit les matériaux et assure le suivi technique.	20% A.S.D.E.A.R. refuse l'ODTC va l'exécuter.
8. Construction en matériaux locaux	31 mai 1983	19.000,000	-Personnel de l'ODTC à Makthar -Démonstration à tout l'environnement	Ce projet propose la construction en matériaux locaux d'un complexe d'un batiment administratif et un logement de directeur. Les objectifs visés sont: 1. Démonstration: valoriser l'image des matériaux locaux 2. Expérimentation technique: Evaluer l'efficacité des matériaux et techniques de construction utilisés. 3. Formation: Former une équipe de maçons et d'ouvriers de la région dans l'utilisation de ces matériaux et cette nouvelle technologie.	25%

9. Eau Potable	31 mai 1983	10.000,000	75 familles à Magrouna	Ce projet propose la construction d'un puits de surface de 15m pour alimenter en eau potable une communauté de 75 foyers à Magrouna. L'objectif est de réaliser ce nouveau projet d'eau potable à travers la communauté elle-même en les impliquant au niveau de la planification, de l'exécution et de son entretien à long terme.	5%
10. Equipe mobile pour les services de de soins de santé de base.	31 mai 1983	14.000,000	Dgt.Foussana Thala Jedliane Pop.totale: 34.897 dont 7398Fem. en âge pré-natal. 16.785 enf. moins de 15 ans seront touchés Total 24.000 bénéficiaires	Ce projet envisage un service ambulatoire, constitué d'un véhicule tout terrain équipé d'une table d'examen gyneco-logique, d'un lave-main, d'une armoire de rangement de médicaments, etc, et sera exécuté par la Direction de l'hopital régional à Kasserine Les objectifs sont: -Améliorer l'accès aux soins sanitaires pour des popu-lations dispersées. -Poursuivre une education sanitaire dans les secteurs isolés à Foussana, Thala, Jedliane. -Aborder une coordination entre la medecine préventive et la vulgarisation agricole.	5%

11. Piste à la Margine	Approuvé par le Plan en en Decembre 1983	20.700,000	Ce projet prévoit l'exécution d'une piste de 5km dont la matière principale est la magine, un résidu de la production des huileries. Objectifs: -Montrer l'efficacité économique et écologique d'une nouvelle technologie de faire des routes secondaires. -Mettre en valeur la margine, un produit résiduel qui est normalement rejeté. -Polluant pour l'environnement.	5%

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Agency for International Development

USAID/TUNIS

MEMORANDUM

TO: Mr. Patrick D. Demongeot - General Development Officer

FROM: Annette Binnendijk - AID/W

SUBJECT: Components of an Evaluation Plan for the CTRD Project

DATE: November 28, 1979

INTRODUCTION

One aspect of my TDY scope of work is to review the Mission's draft evaluation plan for the CTRD. However, given that the current draft is still very preliminary in nature, my efforts might best be directed towards discussing what I would consider to be important components of a final CTRD evaluation plan.

It seems to me that the following are critical issues that need to be resolved and included in the plan:

(1) the levels of evaluation required for the CTRD interventions (sub-projects) and appropriate evaluation methodologies;

(2) the types of indicators required for sub-project evaluation;

(3) the most appropriate approaches for collecting data on these measures;

(4) a clear delineation of responsibilities for evaluation functions among the various actors; and

(5) an evaluation schedule.

I. Levels of Evaluation

Evaluations can in general be categorized into five basic levels or types, which I'll call (a) ex ante appraisals for planning; (b) implementationmonitoring; (c) effectiveness evaluation; (d) impact evaluation, and (e) efficiency evaluation. I will define these types of evaluation below.

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Also, we need to distinguish among the types of interventions that will be active in the CTRD area; namely, (a) all of the Sub-projects in the area which come under the CTDA's responsibility; (b) the AID-funded sub-projects, and (c) the numerous "experimental" interventions that will be funded under the Area Development sub-project's Experimental Fund. For these various types or groups of activities it should be determined in the plan what levels of evaluation are most appropriate and feasible. Although I'll be most concerned here with the evaluation requirements for the AID-funded sub-projects, I will also comment upon possible evaluation levels for the other groups as well.

(a) ex ante appraisals for planning

One type of analysis which is evaluative in nature, is done before sub-project implementation begins. Such analyses involve the collection of baseline data that describe or profile the target population, their characteristics and their basic needs. Such target profile analyses are useful for planning a development strategy in an area and for identification and design of sub-projects intended to meet observed needs. Although such appraisals are "ex ante" in nature, they are nevertheless "evaluative"; the difference being that they forecast probable future impacts rather than look retrospectively at actual impacts.

For the initial AID-funded sub-projects and for the CTRD intervention activities already underway, this type of appraisal is no longer needed. Substantial work of this type was accomplished prior to design of the AID sub-projects.[1/] However, a continuation and refinement of target profile analyses (especially at a more micro-level) could be useful for future CTDA planning, intervention, identification and design activities.

1/ See A. Binnendijk trip report dated June 7, 1978, "Baseline Data Requirements for CTRD" and the CNEA report dated Jan. 1979" Dev. Rural Intégré de la Tunisie Centrale.

(b) implementation monitoring

This type of evaluation iis concerned with the smooth functioning of an intervention's delivery process. The major question to be addressed by this level of evaluation is whether the intervention providing the intended resources, services or other outputs in conformity to the design. In logical framework terminology, the concern is with inputs and outputs.[1/] Evaluation at this level seeks to uncover various sources of implementation shortfalls and delays, such as financial problems, technical and physical implementation problems, institutional and human resource problems.

Such evaluations, if done on a timely basis, can provide useful feedback for improving the implementation of the on-going or similar interventions. Also, this level of evaluation is an important first stage to the higher-level evaluations. That is, there is little point in attempting an effectiveness or impact evaluation if implementation efforts have been a failure.

In the case of the CTRD Project, this type of evaluation should be concerned with individual interventions rather than with the overall project or program.

Careful monitoring of inputs and outputs should be undertaken for all groups of interventions, including AID-funded sub-projects, the Area Development (Experimental Fund) interventions, and all other sub-projects under the CTRD's authority.

1/ The logical framework is AID's basic evaluation methodology.

(c) effectiveness evaluation

This type of evaluation is concerned with the extent of participation, access and utilization of an intervention's outputs by the intended target group. In other words, are the sub-project outputs (resources, services, etc) reaching the appropriate target group? Two aspects of sub-project effectiveness are (a) the extent of coverage, and (b) the existence of biases among various sub-groups'access. In the terminology of the logical frame, this type of evaluation addresses the accomplishments of intervention-purpose.

Unfortunately, this level of evaluation has been somewhat ignored in past discussions of CTRD evaluation and responsibility for doing such critical evaluations has not been clearly assigned. To undertake this level of evaluation is very important for a number of reasons. First of all, it is relatively easily attributable to specific interventions whereas impact is not. That is, it is easier to identify participants or utilizers of outputs of specific interventions than it is to attribute changes in their behavior or socio-economic welfare to those interventions Especially given the complexity of the CTRD projects with its myriad of interacting interventions (sub-projects), isolating and attributing impacts to specific sub-projects may prove difficult. The other factor is time. Whereas (sub-project) effectiveness will become evident in the short or medium term, it may not be possible to evaluate sub-project impact for another decade. Whereas AID/W and Congress have tended to emphasize evaluation at the impact level, this may be in conflict with desires to evaluate and justify our investments in an earlier time-frame.[1/]

1/ This may be especially true given AID's intentions of phasing out of Tunisia in the early 1980s.

Again, I would argue that effectiveness evaluations be done for all groups of interventions. It is a relatively easy, straight -forward type of evaluation to carry out and critical if we want to obtain even a limited understanding of an intervention's success. In the case of the Area Development Project's "experimental interventions" this type of evaluation is critical feed-back for decisions regarding replication of the experiments on a wider scale.

(d) impact evaluation

Impact evaluation is concerned with measuring behavioral and socio-economic changes among the intervention's participants which are attributable to the intervention. Ideally, concern should be not only with intended changes (i.e. progress towards attaining stated goals) but with unintended (possibly undesirable) changes as well. In the logical framework terminology, impact evaluation is concerned with goal attainment. The impact evaluation must not only measure gross changes, but must also seek a method for substracting the extent to which these changes are caused by exogenous (or confounding) factors unrelated to the intervention, in order to arrive at the net change attributable to the intervention alone.

A review of impact evaluation research reveals that there are numerous methods for isolating net changes caused by an intervention, each with varying degrees of validity. The "ideal" approach is to develop a randomized experiment in which an experimental group (participants) is compares to a control group (non-participants) drawn randomly from the same target population. This approach is rarely practical in the real

world since it involves random with-holding of project outputs from some. However, quasi-experiments can be utilized also. A control group can be constructed, so that their socio-economic characteristics and environmental surroundings closely match those of the experimental group (i.e. project participants). Alternatively, reflexive controls can be used, in which the participants act as their own controls. This is done by comparing change among the participants prior to the beginning of the intervention with their change during the intervention and assuming any difference in rates of progress to be the result of the interventions. A final approach for estimating intervention effects versus external or confounding effects is the use of statistical controls. From cross-sectoral analysis (utilizing statistical techniques such as multiple regression, analysis of covariance, multiple discriminant function analysis and log linear models), it is possible to estimate the net change or impact attributable to an intervention by controlling for (holding constant) differences in levels of intervention exposure, along with other relevant socio-economic differences that might affect change. It is this statistical approach that will probably be most appropriate for the CTRD evaluation, because it can deal with a complexity of sub-projects that overlap and intertwine.

The issue will have to be addressed of which project or group of projects should undergo impact evaluations. I would argue that the Area Development Experimental Fund interventions need not have such evaluations, unless there is serious reason to doubt that the interventions are producing the desired behavioral changes. To make decisions concerning replication

await on the outcome of impact evaluations of the experimental interventions may be too time-consuming, and their limited scope may show inconclusive impact results as well. However, for the AID sub-projects and for other major CTDA-operated sub-projects, I would argue for eventual impact evaluations. Such evaluations are required for major AID interventions, both for our accountability to the US Congress and also for potential "lessons learned" to be applied elsewhere in AID. The CTDA must similarly be held accountable for its interventions (to the Ministry of Plan and Agriculture) and should be equally interested in proving that its interventions are responsible for socio-economic progress in the area. Recognizing, however, that it may be very difficult, if not impossible to separate the impact of a number of interacting interventions, one could at least measure the combined impact of CTRD intervention (e.g. health and potable water) on achievement of a particular goal (e.g. reducing infant mortality).

(e) <u>economic efficiency evaluation</u>

This last type of evaluation is really an extension of impact evaluation, in that it compares an intervention's impact with its cost. Efficiency evaluations answer the question: was investment in this intervention an economical use of scarce resources?

There are two major types of efficiency evaluations in use today: cost-benefit analysis and cost-effectiveness analysis. Cost-benefit analysis compares monetized benefits (i.e. net changes or impacts given a monetized value) with costs, whereas cost-effectiveness analysis compares non-monetized benefits (i.e. non-monetized net changes) with costs (by calculating cost per unit of change). Whereas cost-benefit

analysis has the advantage of being able to compare interventions across sectors with different objectives, it is not always possible to assign a monetary value to desired changes resulting from social interventions. For example, how can one value the price of saving a human life?

AID has not placed great emphasis upon this type of evaluation, possibly because we are still struggling with proving impact, possibly because we are willing to forget costs as long as desired impact is achieved. At any rate,it should probably receive low-priority except to the extent that CTDA evaluators should be trained in these techniques so that they will be able to perform such evaluations should the GOT consider them important.

However, AID has placed increasing emphasis (especially in CTRD) upon a simpler form of cost analysis; namely, the assessment of low-cost technologies capable of wide-spread replication. This is really more an extension of effectiveness evaluation, since its prime measure is cost per beneficiary. By comparing the cost per beneficiary ratio of an experimental intervention with alternative approaches and with factors such as the total target group size and total budgetary resources available, the feasibility of widespread replication can be assessed.

II. Measurements for the Evaluation of Projects

To carry out adequate evaluations, it is important that an intervention's inputs, outputs, purposes and goals have been clearly stated. Furthermore, it is essential that these concepts have been translated into objectively

verifiable measures; that is, into indicators (generally quantitative) along which progress can clearly and objectively be measured. Criteria that should be considered in chosing indicators include; (a) validity, (b) reliability, (c) representativeness, and (d) feasibility. That is, indicators should accurately and directly reflect the issue or concept one is trying to measure (validity);the data source should reflect the actual situation (reliability) and should represent the whole population concerned (representative); and the data should be readily available or possible to collect at a reasonable cost (feasibility). Of course, some of these criteria conflict with one-another, and sacrifices sometimes need to be made. For example, cost considerations may require that less than ideal approaches be utilized, such as generalizing based on case-study information or relying on untested informant survey data.

Characteristics of Measures in Monitoring Evaluations

Inputs and outputs of an intervention (whether they be resources, commodities, services, activities or procedures) should be quantified so that they are clearly verifiable (i.e. you will know one when you see one). Furthermore, they should be given a time-frame; inputs and outputs should be given dates or schedules for attainment, so that delays can be identified. Examples of indicators concerned with monitoring or implementation issues might include: percentage cost overruns, shortfalls in staff hiring or participant training targets, delays in commodity delivery etc.

Characteristics of Measures in Effectiveness Evaluations

The purpose of effectiveness indicators is to measure the extent of participation in the intervention by the target population and the extent of biases or inequatities in access among sub-groups. Again, the measures should be quantitative and can best be stated as ratios or percentages. The target population, the active participants and dropouts and their characteristics should be explicitly and quantitatively defined. Indicators such as the ratio of active participants to the target population, measure how widespread the utilization of outputs have become. Participation ratios of possible sub-groups of the target population (such as sex groups, age groups, income groups, etc) as well as drop-out rates by sub-group, reveal measures of bias or inequality in access to project outputs. Examples of effectiveness indicators for a hypothetical school sub-project might include: % of the school-age children attending the school, dropouts by sex and age groups, etc.

Characteristics of Measures in Impact Evaluations

The purpose of impact indicators are to measure socio-economic or behavioral changes (intended and unintended) among intervention participants (gross changes) and measure the extent to which these changes are caused by exogenous factors in order to arrive at a net change or impact of the project. To be measurable, the socio-behavioral changes need to be in operational or verifiable terms; that is, explicitly quantitative. Furthermore, the change needs to be observed over time, or a before-and-after estimate, and the changes should be observed for intervention participants and for a similar control group. Examples of an impact indicator for a hypothetical family planning sub-project might be the

gross change in the fertility rate among project participants minus the gross change in the fertility rate among the control group.

Characteristics of Measures in Efficiency Evaluations

Efficiency indicators do not require any new data collection efforts on their own, so much as a reformulation of data collected for the other evaluation levels, compared with intervention costs. The most commonly used efficiency measures include cost-benefit analysis (in various forms including cost-benefit ratio, net present benefits, and internal rate of return), cost-effectiveness (cost per unit of change), and cost-per-beneficiary ratio. The latter measure is a useful simple indicator of the appropriateness of a "low-cost" technology for widespread replication.

Indicators for CTRD Interventions

These general criteria and guidelines should be followed when choosing which indicators to collect and analyze for CTRD evaluations. Identification of priority indicators for evaluation of the AID sub-projects should be done as soon as possible. Ideally it should have been done prior to the Cornell Team's Informant Survey, but efforts to involve the BUCEN RASA in this endeavor failed. Some progress towards selection of indicators has of course already been made in the project design log frames and implementation schedules but this should be more carefully examined by some evaluation/statistical specialists. Furthermore, the AID sub-projects are but a few of the social and economic interventions. To the extent possible, efforts should be made to coordinate data collection efforts for all CTRD sub-projects' evaluations, particularly at the impact and effectiveness levels where there is likely to be overlap (common objectives).

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	Bias: Variation in program utilization and dropout rates among target sub-groups (by farm size, land tenure, location, socio-economic status, etc.)
Improve Access to Infrastructure	**Coverage:** % of target population utilizing specific infrastructure (e.g. roads, highways, public transportation services, telecommunication services, electricity, marketing facilities, etc).
	Bias: Variation in infrastructure utilization among target sub-groups (sex, age, socio-economic status, location, etc)

Agency for International Development

USAID/TUNIS

MEMORANDUM

TO: Mr. Patrick D. Demongeot - General Development Officer

FROM: Annette Binnendijk - AID/W

SUBJECT: Components of an Evaluation Plan for the CTRD Project

DATE: November 28, 1979

INTRODUCTION

One aspect of my TDY scope of work is to review the Mission's draft evaluation plan for the CTRD. However, given that the current draft is still very preliminary in nature, my efforts might best be directed towards discussing what I would consider to be important components of a final CTRD evaluation plan.

It seems to me that the following are critical issues that need to be resolved and included in the plan:

(1) the levels of evaluation required for the CTRD interventions (sub-projects) and appropriate evaluation methodologies;

(2) the types of indicators required for sub-project evaluation;

(3) the most appropriate approaches for collecting data on these measures;

(4) a clear delineation of responsibilities for evaluation functions among the various actors; and

(5) an evaluation schedule.

I. Levels of Evaluation

Evaluations can in general be categorized into five basic levels or types, which I'll call (a) ex ante appraisals for planning; (b) implementation monitoring; (c) effectiveness evaluation; (d) impact evaluation, and (e) efficiency evaluation. I will define these types of evaluation below.

Also, we need to distinguish among the types of interventions that will be active in the CTRD area; namely, (a) all of the Sub-projects in the area which come under the CTDA's responsibility; (b) the AID-funded sub-projects, and (c) the numerous "experimental" interventions that will be funded under the Area Development sub-project's Experimental Fund. For these various types or groups of activities it should be determined in the plan what levels of evaluation are most appropriate and feasible. Although I'll be most concerned here with the evaluation requirements for the AID-funded sub-projects, I will also comment upon possible evaluation levels for the other groups as well.

(a) ex ante appraisals for planning

One type of analysis which is evaluative in nature, is done before sub-project implementation begins. Such analyses involve the collection of baseline data that describe or profile the target population, their characteristics and their basic needs. Such target profile analyses are useful for planning a development strategy in an area and for identification and design of sub-projects intended to meet observed needs. Although such appraisals are "ex ante" in nature, they are nevertheless "evaluative"; the difference being that they forecast probable future impacts rather than look retrospectively at actual impacts.

For the initial AID-funded sub-projects and for the CTRD intervention activities already underway, this type of appraisal is no longer needed. Substantial work of this type was accomplished prior to design of the AID sub-projects.[1/] However, a continuation and refinement of target profile analyses (especially at a more micro-level) could be useful for future CTDA planning, intervention, identification and design activities.

1/ See A. Binnendijk trip report dated June 7, 1978, "Baseline Data Requirements for CTRD" and the CNEA report dated Jan. 1979" Dev. Rural Intégré de la Tunisie Centrale.

(b) implementation monitoring

This type of evaluation iis concerned with the smooth functioning of an intervention's delivery process. The major question to be addressed by this level of evaluation is whether the intervention providing the intended resources, services or other outputs in conformity to the design. In logical framework terminology, the concern is with inputs and outputs.[1/] Evaluation at this level seeks to uncover various sources of implementation shortfalls and delays, such as financial problems, technical and physical implementation problems, institutional and human resource problems.

Such evaluations, if done on a timely basis, can provide useful feedback for improving the implementation of the on-going or similar interventions. Also, this level of evaluation is an important first stage to the higher-level evaluations. That is, there is little point in attempting an effectiveness or impact evaluation if implementation efforts have been a failure.

In the case of the CTRD Project, this type of evaluation should be concerned with individual interventions rather than with the overall project or program.

Careful monitoring of inputs and outputs should be undertaken for all groups of interventions, including AID-funded sub-projects, the Area Development (Experimental Fund) interventions, and all other sub-projects under the CTRD's authority.

1/ The logical framework is AID's basic evaluation methodology.

(c) effectiveness evaluation

This type of evaluation is concerned with the extent of participation, access and utilization of an intervention's outputs by the intended target group. In other words, are the sub-project outputs (resources, services, etc) reaching the appropriate target group? Two aspects of sub-project effectiveness are (a) the extent of coverage, and (b) the existence of biases among various sub-groups'access. In the terminology of the logical frame, this type of evaluation addresses the accomplishments of intervention-purpose.

Unfortunately, this level of evaluation has been somewhat ignored in past discussions of CTRD evaluation and responsibility for doing such critical evaluations has not been clearly assigned. To undertake this level of evaluation is very important for a number of reasons. First of all, it is relatively easily attributable to specific interventions whereas impact is not. That is, it is easier to identify participants or utilizers of outputs of specific interventions than it is to attribute changes in their behavior or socio-economic welfare to those interventions. Especially given the complexity of the CTRD projects with its myriad of interacting interventions (sub-projects), isolating and attributing impacts to specific sub-projects may prove difficult. The other factor is time. Whereas (sub-project) effectiveness will become evident in the short or medium term, it may not be possible to evaluate sub-project impact for another decade. Whereas AID/W and Congress have tended to emphasize evaluation at the impact level, this may be in conflict with desires to evaluate and justify our investments in an earlier time-frame.[1/]

1/ This may be especially true given AID's intentions of phasing out of Tunisia in the early 1980s.

Again, I would argue that effectiveness evaluations be done for all groups of interventions. It is a relatively easy, straight -forward type of evaluation to carry out and critical if we want to obtain even a limited understanding of an intervention's success. In the case of the Area Development Project's "experimental interventions" this type of evaluation is critical feed-back for decisions regarding replication of the experiments on a wider scale.

(d) impact evaluation

Impact evaluation is concerned with measuring behavioral and socio-economic changes among the intervention's participants which are attributable to the intervention. Ideally, concern should be not only with intended changes (i.e. progress towards attaining stated goals) but with unintended (possibly undesirable) changes as well. In the logical framework terminology, impact evaluation is concerned with goal attainment. The impact evaluation must not only measure gross changes, but must also seek a method for substracting the extent to which these changes are caused by exogenous (or confounding) factors unrelated to the intervention, in order to arrive at the net change attributable to the intervention alone.

A review of impact evaluation research reveals that there are numerous methods for isolating net changes caused by an intervention, each with varying degrees of validity. The "ideal" approach is to develop a randomized experiment in which an experimental group (participants) is compares to a control group (non-participants) drawn randomly from the same target population. This approach is rarely practical in the real

world since it involves random with-holding of project outputs from some. However, quasi-experiments can be utilized also. A control group can be constructed, so that their socio-economic characteristics and environmental surroundings closely match those of the experimental group (i.e. project participants). Alternatively, reflexive controls can be used, in which the participants act as their own controls. This is done by comparing change among the participants prior to the beginning of the intervention with their change during the intervention and assuming any difference in rates of progress to be the result of the interventions. A final approach for estimating intervention effects versus external or confounding effects is the use of statistical controls. From cross-sectoral analysis (utilizing statistical techniques such as multiple regression, analysis of covariance, multiple discriminant function analysis and log linear models), it is possible to estimate the net change or impact attributable to an intervention by controlling for (holding constant) differences in levels of intervention exposure, along with other relevant socio-economic differences that might affect change. It is this statistical approach that will probably be most appropriate for the CTRD evaluation, because it can deal with a complexity of sub-projects that overlap and intertwine.

The issue will have to be addressed of which projects or group of projects should undergo impact evaluations. I would argue that the Area Development Experimental Fund interventions need not have such evaluations, unless there is serious reason to doubt that the interventions are producing the desired behavioral changes. To make decisions concerning replication

await on the outcome of impact evaluations of the experimental interventions may be too time-consuming, and their limited scope may show inconclusive impact results as well. However, for the AID sub-projects and for other major CTDA-operated sub-projects, I would argue for eventual impact evaluations. Such evaluations are required for major AID interventions, both for our accountability to the US Congress and also for potential "lessons learned" to be applied elsewhere in AID. The CTDA must similarly be held accountable for its interventions (to the Ministry of Plan and Agriculture) and should be equally interested in proving that its interventions are responsible for socio-economic progress in the area. Recognizing, however, that it may be very difficult, if not impossible to separate the impact of a number of interacting interventions, one could at least measure the combined impact of CTRD intervention (e.g. health and potable water) on achievement of a particular goal (e.g. reducing infant mortality).

(e) <u>economic efficiency evaluation</u>

This last type of evaluation is really an extension of impact evaluation, in that it compares an intervention's impact with its cost. Efficiency evaluations answer the question: was investment in this intervention an economical use of scarce resources?

There are two major types of efficiency evaluations in use today: cost-benefit analysis and cost-effectiveness analysis. Cost-benefit analysis compares monetized benefits (i.e. net changes or impacts given a monetized value) with costs, whereas cost-effectiveness analysis compares non-monetized benefits (i.e. non-monetized net changes) with costs (by calculating cost per unit of change). Whereas cost-benefit

analysis has the advantage of being able to compare interventions across sectors with different objectives, it is not always possible to assign a monetary value to desired changes resulting from social interventions. For example, how can one value the price of saving a human life?

AID has not placed great emphasis upon this type of evaluation, possibly because we are still struggling with proving impact, possibly because we are willing to forget costs as long as desired impact is achieved. At any rate,it should probably receive low-priority except to the extent that CTDA evaluators should be trained in these techniques so that they will be able to perform such evaluations should the GOT consider them important.

However, AID has placed increasing emphasis (especially in CTRD) upon a simpler form of cost analysis; namely, the assessment of low-cost technologies capable of wide-spread replication. This is really more an extension of effectiveness evaluation, since its prime measure is cost per beneficiary. By comparing the cost per beneficiary ratio of an experimental intervention with alternative approaches and with factors such as the total target group size and total budgetary resources available, the feasibility of widespread replication can be assessed.

II. Measurements for the Evaluation of Projects

To carry out adequate evaluations, it is important that an intervention's inputs, outputs, purposes and goals have been clearly stated. Furthermore it is essential that these concepts have been translated into objectively

verifiable measures; that is, into indicators (generally quantitative) along which progress can clearly and objectively be measured. Criteria that should be considered in chosing indicators include; (a) validity, (b) reliability, (c) representativeness, and (d) feasibility. That is, indicators should accurately and directly reflect the issue or concept one is trying to measure (validity);the data source should reflect the actual situation (reliability) and should represent the whole population concerned (representative); and the data should be readily available or possible to collect at a reasonable cost (feasibility). Of course, some of these criteria conflict with one-another, and sacrifices sometimes need to be made. For example, cost considerations may require that less than ideal approaches be utilized, such as generalizing based on case-study information or relying on untested informant survey data.

Characteristics of Measures in Monitoring Evaluations

Inputs and outputs of an intervention (whether they be resources, commodities, services, activities or procedures) should be quantified so that they are clearly verifiable (i.e. you will know one when you see one). Furthermore, they should be given a time-frame; inputs and outputs should be given dates or schedules for attainment, so that delays can be identified. Examples of indicators concerned with monitoring or implementation issues might include: percentage cost overruns, shortfalls in staff hiring or participant training targets, delays in commodity delivery etc.

Characteristics of Measures in Effectiveness Evaluations

The purpose of effectiveness indicators is to measure the extent of participation in the intervention by the target population and the extent of biases or inequatities in access among sub-groups. Again, the measures should be quantitative and can best be stated as ratios or percentages. The target population, the active participants and dropouts and their characteristics should be explicitly and quantitatively defined. Indicators such as the ratio of active participants to the target population, measure how widespread the utilization of outputs have become. Participation ratios of possible sub-groups of the target population (such as sex groups, age groups, income groups, etc) as well as drop-out rates by sub-group, reveal measures of bias or inequality in access to project outputs. Examples of effectiveness indicators for a hypothetical school sub-project might include: % of the school-age children attending the school, dropouts by sex and age groups, etc.

Characteristics of Measures in Impact Evaluations

The purpose of impact indicators are to measure socio-economic or behavioral changes (intended and unintended) among intervention participants (gross changes) and measure the extent to which these changes are caused by exogenous factors in order to arrive at a net change or impact of the project. To be measurable, the socio-behavioral changes need to be in operational or verifiable terms; that is, explicitly quantitative. Furthermore, the change needs to be observed over time, or a before-and-after estimate, and the changes should be observed for intervention participants and for a similar control group. Examples of an impact indicator for a hypothetical family planning sub-project might be the

gross change in the fertility rate among project participants minus the gross change in the fertility rate among the control group.

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SUB-PROJECT PURPOSE	EFFECTIVENESS INDICATORS
	Bias: Variation in program utilization and dropout rates among target sub-groups (by farm size, land tenure, location, socio-economic status, etc.)
Improve Access to Infrastructure	**Coverage:** % of target population utilizing specific infrastructure (e.g. roads, highways, public transportation services, telecommunication services, electricity, marketing facilities, etc).
	Bias: Variation in infrastructure utilization among target sub-groups (sex, age, socio-economic status, location, etc)

EVALUATION PLAN FOR THE CTRD PROJECTS

INTRODUCTION

One outcome of the NEAC review in Washington of the four Central Tunisia Rural Development PIDs was expressed in a memo by Bradshaw Langmaid, NE/DP (September 20, 1978), as follows:

> "The (Area Development) PP should describe the Tunisian evaluation institution, staffing, data collection system, and methodology. We seek Tunisian evaluation capability and methodology which is adequate to our needs also, or to which we would provide technical assistance to bring it up to an acceptable level of competence. The PP should describe the quantifiable indicators by which the end of project status is to be judged, and the data collection system and evaluation methodology to be used."

This report addresses these issues and represents for the most part conversations and issues discussed with Norm Nicholson, DSB/RAD, Frank Young, (rural sociologist) consultant from the DS/RAD's Participation Project with Cornell University, and Leo Jakobson, (regional planner) consultant for the DS/RAD Area Development Project with the University of Wisconsin.

DATA REQUIREMENTS

An information system will be required for the collection and analysis of data on the CTRD zone that will be directly useful for the planning

process, project development and subsequent evaluation of project impact. An initial determination of the types of data needed include the following broad categories:

(1) Socio-Economic Characteristics of the Population

- spacial distribution, settlement patterns and densities of population
- migration data
- income levels, intra-regional and intra-household distribution of income
- non-monetary quality of life indicators and their distribution: indicators might include mortality and morbidity rates, nutrition status, literacy, housing conditions, access to basic needs, etc.
- social structure and cultural setting information, such as attitudes, practices, ethnic discriminatory problems, administrative and access problems that may constrain project success.

(2) Characteristics of the Environment and Agricultural System

- data on topography, soils, climate and rainfall
- indicators of resource management, such as water table levels, spread of erosion, deforestation, etc.
- location, quality and quantity of exploitable natural resources, especially water sources
- frequency and magnitude of crop failure
- land tenure and distribution data
- land use and cropping patterns in irrigated and non-irrigated areas
- agricultural yields and production data in irrigated and non-irrigated areas

(3) Characteristics of Infrastructural Improvements and Services Provided

- location and conditions of infrastructure, such as roads, produce collection centers, potable water systems, waste disposal systems, shallow and deep-well irrigation systems, energy sources, small industries, extension offices, repair shops, clinics, schools, etc.

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- location, number and quality of public services, such as medical personnel, teachers, extension workers, credit facilities, public transportation, etc.
- indicators of population's access and utilization of such infrastructure and services
- indicators of appropriate technology development and use, such as cost per beneficiary ratios.

Some of the above data should be collected at the "macro-level", in the sense that it will be needed for the entire CTRD area. This data will be most useful for analytical planning and evaluation purposes if it is collected at the secteur level (i.e., a high level of disaggregation).

In addition to the above general or macro-data file for the whole CTRD area, there will probably be some need for micro-area data collection efforts. If some types of data are needed only for a specific project design or evaluation, data collection for this should be limited to the immediate project impact area (this is especially the case for the "experimental" interventions planned under the Area Development Project, each of which will initially affect only a small area).

For measurement of regional progress and disparity reduction relative to Tunisia as a whole, some limited progress indicators will be required at the national level as well. However, this data should be collected from secondary sources only; such data tends to be readily available and furthermore would be far too expensive to contemplate collecting by primary field research. (Much of the baseline data at this level has already been gathered from various ministry sources. See CNEA

report,"Project de Developpement Rural Integre de la Tunisie Centrale: Analyse des Donnees Techniques et Socio-Economiques" or Binnendijk trip report, June 7, 1978.)

To be useful for the evaluation of project impact upon the CTRD area, data will have to be collected periodically, preferably annually for a period of four years.* An initial baseline data collection effort should be completed no later than the summer of 1979. During the spring of 1979 a complete inventory should be carried out of existing data sources for the CTRD area, to be followed by primary field surveys during the summer (after the rains and before Ramadan) to fill in information gaps. This baseline effort will be an important input into the planning process and for the identification and development of experimental project interventions. It will also serve as the "baseline" for the measurement of progress in later evaluations.

The above outline of data needs should also be sufficient to satisfy AID's specific evaluation requirements (see logframes' verifiable indicators), in addition to serving the functional requirements of the Planning and Evaluation Division of the Central Tunisia Development Authority.

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*Some of the projects' impacts at the goal level may be longer-term in nature and therefore an ex poste evaluation should be considered several years after CTRD projects' termination date. (DS/RD Participation Project with Cornell terminates in 10/81 with forward funding for another year.)

DATA COLLECTION METHODS

The required data collection efforts should be either directly implemented by the Planning and Evaluation Division staff or sub-contracted with other Tunisian institutions with specific capabilities and personnel, such as the National Center for Agricultural Studies, the National Institute of Statistics, the National Institute of Nutrition, statistical divisions of various ministries, etc. Because of the diverse and broad spectrum of data needs, a combination of data sources and data collection methods will most likely be necessary as judged most reliable and cost-effective. One possibility would be to cross-check the validity of alternative methods where options exist and then use the cheaper method, if reliability is reasonable. The following lists several possible data sources and collection methods:

(1) Inventory of Secondary Sources from Agency Documents, Records and Files

Perhaps, needless to say, a thorough search should be made of already existing data from public and private institutional sources, before primary fieldwork is undertaken. However, a major problem with ministry data is that it tends to be at too aggregate a level for the analytical needs of the CTRD. Nevertheless, some of the needed data may be available at the local government offices. Also, some of the national level sources of data (notably the census and to a lesser extent the national expenditure and nutrition surveys) have raw data files that would be of use to the CTRD if re-tabulations would be made specifically for the zone. Sub-contracting for such tabulation from existing data files may be a cost-effective approach where available for obtaining needed data.

(2) Informant Surveys

This approach is a survey of "informants", usually community leaders with some knowledge about their village or locality. Such a survey seems best suited for gathering inventory-type information such as the number and location of infrastructure, institutions and services. Some information regarding social structure, local demands and needs, problems of access and utilization of services, etc., might also be obtained by this method. The major advantage of this type of survey is its low cost, while its major disadvantage is reduced reliability. (In most cases, this method can be objectively verified by spot, in-depth surveys if judged desirable.)

(3) Sample Survey of Households

The sample survey is a well tested technique that provides statistical tests for reliability. Traditionally, the sample survey of households has been the method for collecting data on income levels and expenditures, distribution data, mortality rates, nutrition indicators and attitudinal questions. Information regarding the population's access and utilization of public services, views on priority needs, etc., might also be usefully collected by this method. The major problem with this method is that if large amounts of disaggregation are required, a large sample will be needed at probable high cost.

(4) Observational Micro-Studies

This type of study would concentrate at the community level. Data from such studies would not have general applicability to the wider region, but may be a useful approach for analysis of impact of specific experimental interventions in a limited locale.

(5) Geological, Agricultural, Technical and Other Specialized Surveys

Collection of relevant information on topography, climate, natural resource availability, crop yields, technological options and costs, etc., may require specialized types of surveys to obtain what is needed

(6) Aerial Photography and Mapping

Analysis of existing aerial photographs of the zone may provide useful spacial information on population, land settlement patterns, access to roads and other infrastructure, location of erosion, land use and distribution patterns, etc.

METHODOLOGICAL APPROACHES TO DATA ANALYSIS

The same data base system described above will serve a number of analytical needs of the Planning and Evaluation Division. The first and more immediate need for data and analysis is for guidance in the process of developing a plan or strategy in the CTRD area, and for identification of projects. For this, baseline data is required that outlines at a fairly disaggregated level (the secteur level) the demographic, social, economic, environmental and institutional setting of the zone. The analytical methods for the planning purpose should aim at identifying potential beneficiary groups and their priority basic needs, in combination with the resource and technical options available in their locale. Such analysis will be fairly descriptive in nature, involving cross-tabulations that identify useful combinations of characteristics, or typologies. Project design will probably require more detailed analyses at the local, project-specific level, including social soundness analysis, technical feasibility, etc.

The data system will also have to serve evaluation needs, the most complex type of analysis. At the simplest level, trendline analysis can be used to trace improvements in the incomes and quality of life indicators of the zone population. These zone-specific trends can furthermore be compared to the rates of progress in these indicators at the national level to see if the objective of reducing regional disparities is being accomplished. However, establishment of the achievement of such goals does not necessarily prove that the project interventions were an important determining factor. For this, the techniques of multiple regression and correlation analysis are useful. Analysis of causal linkages between project interventions and improvements in desired goals becomes complex because of the need to control for other factors external to the project that might also affect the goal achievement (as for example, fortunate weather, improvements in educational levels, etc). Analytically such factors can be controlled for, provided that there are a sufficient number of cases of analysis. All levels of evaluation analysis obviously require time-series data in order to determine improvements or trends. In general, the level of analytical sophistication required to determine causal linkages becomes more difficult as one progresses from project outputs, to purposes, and to goals. The requirement for "proof" of goal impact needs to be weighed against possible excessive costs of such evaluations, especially if evaluation at the purpose level is convincing.*

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*It is important that the evaluation exercise not overwhelm the small planning unit which will have a staff of only 4 or 5 professionals and will be responsible for plan development for the entire CT region (not merely 8 delegations), the administration of $6.4 million of pilot projects, integration and coordination of ministerial activity in the region as well as the evaluation system.

INSTITUTIONAL REQUIREMENTS

It is recommended that a Planning and Evaluation Division is created within the Central Tunisia Rural Development Authority which has responsibility for the following major functions:

(1) Establishment of a Planning Process

This will involve an ongoing appraisal of an appropriate development strategy for the CTRD zone. It should involve an analysis of the target population's poverty situation and major needs, the development of appropriate, cost-effective technologies for interventions, issues of resource base exploitation and management, and the overall economic development of the region.

(2) Development of Projects

Another related function will be the identification and design of innovative, experimental projects with low cost-beneficiary ratios that may have widespread replicability in Central Tunisia.

(3) Project Evaluation

This will involve an ex-poste assessment of the impact of CTRD projects, both the four major projects and the numerous experimental sub-projects under the area development project. The evaluations will address the projects' impacts upon project purposes and also upon the wider CTRD goals.

Tunisian Staffing Requirements

It is suggested that at least five professional level personnel be hired, one of which will be the Director of the Division. These

professionals should have masters level training or diploma and possibly work experience in their fields. The mixture of skills most appropriate for the division's work would include economics, regional planning, agronomy and agricultural economics, project design and evaluation skills, social sciences, survey techniques, statistical analysis and data processing skills. In addition, eight full-time para-professionals are recommended with baccalaureate level training in a similar mix of fields. For specific data collection efforts implemented by the Division, it is suggested that ten summer interns are hired from a local university as interviewers.

U.S. Technical Assistance

In addition to two long-term resident advisors, specialists in regional development planning and agricultural systems, the following short-term U.S. technical assistance is envisioned for consulting and on-the-job training:

- 12 person-months per year of consultant time from DS/RAD Area Development Project, with the University of Wisconsin, with inter-disciplinary skills in regional development planning, project design and evalution, natural resource management, marketing systems, and local administration and finance.

- 8 person-months of consultant time per year from the DSRD Area Development Project funds. Of this about 4 person-months will be required for consulting and training of various aspects of data collection and analysis, including possibly survey techniques, sampling methods, statistics, computer programming, etc.* The remainder will be available for additional, multi-disciplinary technical assistance needs including agricultural production systems, small business development, delivery of social services,etc.

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*Including a 4 person-month allocation forward funded for a 4th year, for evaluation purposes.

- 3 person-months of consultant time per year from the DS/RAD Participation Project with the University of Cornell, for consulting on aspects of the data collection and analysis system.

Office Equipment

Data processing equipment will be necessary for processing, storing and analyzing the data system. The level of sophistication most appropriate for the Division has not yet been determined, but will be either of the desk calculator variety (with programming, memory, statistical and printing capabilities) or a mini-computer.

Co-ordination and Sub-contracting of Studies

Given the relatively small staff and broad functions of the Planning and Evaluation Division, it may be necessary to contract out some of the data collection and special studies with other Tunisian institutions.*

Success of the Division will also depend heavily upon the ability to coordinate and involve other Tunisian ministries and agencies. At the information system level, there is a need to see what relevant information has already been gathered by other agencies in order to avoid duplication where possible. At the project design and evaluation level, it is important to involve and coordinate with ministries if they are to be convinced of the effectiveness of a project's approach and its replicability.

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*A total allocation of 48 person-months of consultant time (including TCH and Tunisian) is suggested for such purposes. In addition, about $300,000 of PL 480 Title I counterpart funds are available per year for studies and surveys.