# Second external evaluation report of the Cornell-UADY-UV-INIFAP TIES project "Decision Support of Ruminant Livestock Systems in the Gulf Region of Mexico" (July-August, 2007)

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#### 1. Introduction

This report corresponds to the second external evaluation of the project, which is executed through partnership between the Universidad Autónoma de Yucatan (UADY), the Universidad Veracruzana (UV), the Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP) and Cornell University. The report of the first evaluation (carried out in July, 2006) was circulated at the time among participants and made available on the project's website. It led to the following conclusions and recommendations. No dissenting opinions about these were received by the evaluator:

- a) The project has an impressive list of activities and outputs during its first two years which fit closely to those originally planned. There has been consistently positive impact at the personal level. A 'widening of vision' is one of the benefits most consistently reported. Special importance is also attached to the changes at the institutional level which the project has helped to bring about, since these should be sustainable over time and pave the way for more effective international cooperation in future.
- b) There is strong institutional commitment to the project on the Mexican side, at the highest level of authority. Still, the number of collaborating faculty is low, the dissemination of the project outputs (eg didactic materials) is limited, and there have been considerable logistic and administrative problems during the first two years of operation. An extra effort is required in the project's final year if fullest benefit is to be obtained from major investment (financial, time and effort) already made by the partner institutions, and if fullest advantage is to be taken of the opportunities it offers. The more successful its completion in 2007, the greater the options the Mexican partner institutions will have for obtaining financial support for developments they plan to make in the future.

It is therefore recommended that the high level of commitment to the project, which is evident among the authorities of the partner institutions, should be translated even more effectively into actions in the final year, with a view to:

- empowering those responsible for the routine management of the project with matching decision-making and executive power, ensuring agile, flexible operation. At the same time, this should lighten the presently very heavy 'transaction costs' of the project both on the Mexican and Cornell sides.

- continuing to work towards administrative arrangements which will remove, as far as possible, any disincentives for potential student/faculty participants and encourage wider participation by students and staff in the final year. This will enable partner institutions to take fullest advantage of the present project before it ends, and prepare for similar opportunities that may occur in future
- developing an urgent new strategy for disseminating information about the project widely among students and staff, to encourage greater participation, and for broadening the usage of the project's didactic materials and of its teaching/learning tools (eg through special campaigns in the libraries)
- promoting the routine use of simple evaluation processes for all the project's activities in Mexico, making use of the results for planning and further adjustment
- -working towards incentive/reward systems for staff which will encourage participation in projects of this kind in future. This requires a balanced agenda of research, underand post-graduate teaching, emphasizing the interdependence of research and teaching, and a problem-solving research/teaching focus
- continuing to explore additional sources of funding locally which might complement the project's work in its final year, and prepare now for finding new sources of support after 2007 to develop those aspects of the present project which have proved most valuable to the Mexican partners
- following up the project's inter-institutional initiatives to extend cooperation between the Mexican partners on themes of mutual interest.

The objective of this second report is to build on the first one, rather than repeat its contents. It aims to concentrate on changes which may have occurred in this final year, attempt an overall assessment of the project, and discuss implications for work in the future. Most attention is focused on the UADY among the Mexican partners, due to their predominant role and contribution to activities. It is also noted that the condition of INIFAP in the project was somewhat different since participants from that institution had previous links with Cornell. The project's activities and outputs are documented fully in reports available on the website, and are not detailed here.

### 2. Methodology

The evaluator visited all participating institutions in 2006 so it was agreed that the present assessment should be based on existing documentation and electronic correspondence, without further travel. A calendar of activities was prepared, circulated and no objections were raised. A list of participants whose opinions were to be sought was drawn up and circulated to members of each institution. All suggested additions were incorporated in the final list of 36 individuals, who were contacted by e-mail. They were classed into four groups as shown in Table 1. Each group was sent a separate letter and a questionnaire to

elicit their opinions (Annex 1). Initial response to this was rather poor (see Table 1) so a reminder was sent and a new deadline fixed. The number of final responses received is shown in the Table. A draft of the present report was circulated to those who had responded. Further comments were received from five participants (3 Mexico, 2 USA). The final version was sent to representatives of each partner institution to check for factual errors before it was formally submitted.

Table 1. Responses received to request for opinions about the TIES project

Class of participant	No. contacted	Replies received on time (first deadline)	Total number replies received (second deadline)
Mexico professors/ researchers	14	0	7
Cornell professors	3	2	2
Graduate and short term Cornell students	12	3	6
Undergraduate students	7	0	0
TOTAL	36	5	15

### 3. Achievement of Objectives

The extent to which each of the project's original objectives has been reached is discussed below.

3.1 Collaboratively address an array of complex development issues and challenges related to the growth in demand for livestock products and changes in trade policy over the next two decades.

The activities planned for the project have, for the most part, been carried out satisfactorily, despite cancellation of some and limited participation in others. So a start has been made towards achieving this first ambitious objective. However, although discussion about the issues within an integrated systems-based framework has pervaded the project's teaching activities, and there has been active inter-institutional collaboration in course work, a holistic, collaborative approach to solving specific development problems has been less evident in other areas. The research topics have been somewhat specific and isolated, dissemination of the results at field level has been very limited, and there appears to have been little or no interaction with local policy makers. At the same time, important opportunities for collaboration between the partner institutions for discussion and further planning (eg inter-institutional tutoring of graduate students; discussion of the research results through video-conferencing), have been lost, and the

limited field activity has reduced opportunities for participation from producers. So while the multiple dimensions of the problems may have been discussed in the classroom, they have not yet been addressed systematically at the research, extension and policy levels, or in the sense of proposing integrated solutions and facilitating necessary changes. However, a promising development in this area is the setting up of an inter-disciplinary group of faculty and students from the UADY working on farms at Tizimin with local financial support. This initiative is perceived by UADY faculty as partly attributable to experience obtained from the TIES project.

3.2 Strengthen the capacity of Mexican partner institutions and Cornell University to conduct problem-solving research, instruction, and service, that is, to identify and address the relevant development issues

In the area of *instruction*, institutional capacity has been strengthened in several ways. First, the execution of the joint courses, especially IARD 602, has demonstrated the relevance of an integrated approach to problem solving and exposed students and faculty to the reality of farming systems in low-income tropical communities. This is a rare opportunity both for the Mexican institutions and Cornell, and will have enriched their capacity to teach local and international students. Second, the project has served to demonstrate the use of a variety of powerful and innovative electronic tools for instruction and information exchange, which can be incorporated more widely, as required, by the Mexican institutions. Third, the project is considered by UADY faculty to have served as the stimulus for introducing an English teaching program for undergraduates, since language was found to be such an important barrier to participation in the TIES activities. It also appears to have stimulated the introduction of internship programs for undergraduates at the UV as well as the UADY. It is urgently necessary to extend this facility to graduate students and permit them to take credits in other recognised institutions, provided this enriches their overall program.

In the areas linked directly to *research and service*, institutional strengthening seems to have been more tenuous.

On the Cornell side, institutional benefits have accrued from the additional experience of research in tropical farming systems, enabling them to refine their own agenda and methods. It will also have provided additional insights into the nature of the institutions in countries where the University collaborates, and into the particular problems which Mexican institutions have to face. This should prepare Cornell for even more fruitful collaboration in future.

On the Mexican side, at least three new research projects are reported to have been designed and financed, partly as a result of participation in the TIES Project. This important outcome has *institutional* as well as personal benefits. On the other hand, a disappointing piece of evidence is the very consistent perception among faculty and student participants from all institutions that there has been no decisive institutional action by the UADY to deal with the problems which were identified early on as limiting the project's potential. These problems were perceived by participants to include: lack of

broad commitment and interest in the project; an insufficient incentive/ reward system to encourage faculty participation; the excessive load of course work and other previously assumed responsibilities; the complicated and rigid administrative system which precludes the agile movement of resources; budget insufficiencies and delayed release of assigned funds; problems of granting credits and permission to encourage wider student participation; timetable clashes which limited joint activities; and limited outreach activity in the field. The extent to which these problems were more perceived than real is discussed later (see Section 4), but the net result has been what is widely acknowledged to have been an institutional lack of interest in the project on the side of the UADY.

The carry-over effect which this project has had into plans for future cooperative research would seem to be an important indicator of *institutional* strengthening. It is therefore significant that an MOU has been signed between the UV and Cornell for further cooperation, and new cooperative projects are being developed with INIFAP. However, it is disappointing that there are no plans for future institutional collaboration between the two major partners, Cornell and the UADY, although some joint work does continue at the individual level.

3.3 Contribute to the preparation of a skilled cadre of inter-disciplinary, systems-oriented agricultural researchers and extensionists that can address the needs of Mexico's livestock sector in a global marketplace.

This has been the project's main strength. There is consistently high praise from participants who have participated in training activities, particularly from those who spent time at Cornell. There has been unquestionable personal and professional benefit to those who participated in the short courses, the joint courses (IARD 402, 602), and, notably, the MS program and the study periods at Cornell. The benefits were recognized by Mexican faculty and students, as well as Cornell international students. One of the comments most frequently made in this context, refers to a "widening of vision" and an understanding of a systems-based, integrated approach to problem solving. One participant even stated that the project had changed his "vision of life itself". As pointed out above, the impact went beyond training to enabling new research projects to be undertaken.

On the other hand, it must also be noted that the *number of beneficiaries* has been below the real potential of the project for various reasons. This seems partly due to the limited interest in the project on the part of the UADY faculty, but mainly to the administrative problems which limited the numbers of students and faculty able to participate. A notable case is that only three, instead of four, Mexican students went to Cornell for a semester in substitution for the fourth MS student, who also was unable to participate. Participation was further limited by the lack of English language skills in many cases although, as shown above, the UADY now offers opportunities to undergraduates for training in this area. These factors probably also affected the *quality* of the student participants, by limiting the pool from which participants could be drawn. Some very sketchy evidence in this regard was obtained by the evaluator in the responses to the request for opinions. There were very variable levels of perceptiveness and ability for clear expression among

the respondents in their native language. At the same time, the reduced level of faculty involvement has also limited the number of beneficiaries outside the project itself. This aspect is dealt with in more detail in Section 3.5 below.

3.4 Increase attention to, and understanding of, international education and development issues at Mexican partner institutions and Cornell University (and their broader constituencies).

Arguably the most important outcome of this project for the Mexican institutions is that participation will have provided experience in the operation of international projects with strong educational components, and pointed up some of the steps which need to be taken if they chose to extend this cooperation in future. Reference to other benefits is made in the foregoing sections.

For Cornell, the benefits outlined in Section 3.2 all contribute to their ability to carry out research and teaching for international agricultural development, which has traditionally been a priority objective for the university.

3.5 Promote the broadest possible dissemination of the information generated through the partnership's research and instructional efforts.

As pointed out earlier, there have been very important initiatives in this area, primarily from the Cornell side, to use innovative electronic means of communication and information sharing, including the website, videotaping, videoconferencing, CD's and printed materials, all of excellent quality. However, the utilization of these tools and the dissemination of the materials beyond the small group of project participants have been quite limited, even within their own institutions. At the field level, communication has not been strong. Dissemination of the project's outputs has been very reduced on the part of the UADY (eg field days to discuss research not yet held) and there is a considerable backlog of information still awaiting analysis and/or publication (eg sheep/cattle survey results; Spanish version of sheep research). Consequently, much of the valuable information generated by the project has yet to be made available to the farming community and political decision makers. This can still be remedied, but needs a more effective local strategy.

#### 4. Discussion

Two clear trends seem to emerge from the above analysis.

First, the objectives have been fulfilled to a partial extent. The most significant outcomes are probably the personal and professional benefit to participants as *individuals*, and the experience gained by the Mexican *institutions* in the operation of international educational projects.

Second, there has been a series of problems which have prevented full advantage being taken of the project on either side. A large part of the difficulty seems to have stemmed

from the limited involvement in the project on the side of the UADY. This was the single main weakness consistently mentioned in the responses of faculty and students to the evaluator's questionnaire, and was frequently described as a lack of interest. It was also reflected in the response pattern to requests for opinions for this evaluation. It had a major negative impact on all activities: student participation, dissemination of the project's products and field outreach, besides increasing the "transaction costs" for the partner institutions. The effects were also evident at the Mexican leadership level, notably in the third year, when there was a long breakdown in communication with Cornell and last-minute cancellation of some scheduled activities. The explanation lies to some extent in the nature of the project itself, the benefits of which are mainly academic and intellectual. This contrasts with most previous ones where the benefits often included equipment, operational resources and visiting scientists. Efforts were certainly made to consult and communicate during the planning stage, there was much enthusiasm among those originally involved in the design, budgets were approved and support was expressed by the highest level authorities. But this did not ensure (or derive from) much support further down, and local leadership responsibilities were apparently not fully defined. The project was perceived by some of the faculty as the 'territory' of the few individuals involved in the original planning, and more 'supply' than 'demand' driven.

The lack of broader based support at the UADY must also have been partly due to the administrative obstacles which were encountered, but the two types of problem became interdependent and persistent. The project's academic component had important administrative implications for each participating institution. Perhaps due to the novelty of this kind of collaboration, the implications were either not discussed sufficiently at the UADY during the planning stage, or ways were not foreseen to overcome the evident incompatibilities between the partners. Alternatively, the UADY group was overly optimistic about the extent to which obstacles could be overcome as the project proceeded, or were satisfied that whatever benefits accrued would be worthwhile, even if they were less than the potential. But if so, they overlooked the point that institutional incompatibilities could be a source of conflict and frustration on the part of their collaborators, as proved to be the case. As it was, the operation of the project was burdensome on both sides, the 'transaction costs' excessively high, and opportunities were lost all too frequently because of bottlenecks such as lack of permits for participation in project activities, the absence of a credit system to compensate students who took the courses, timetable clashes and teaching overload.

Another problem area concerned finances. It is noted that the UADY was the only Mexican partner to commit financial resources, because of restrictions at the UV and INIFAP. At the UADY, the project budget was approved at all levels, but there are still differences of opinion among the faculty as to whether the funds were in fact available or had to be diverted from other areas, thus competing with other demands for scarce resources. In any case, the routine for fund release was complicated and onerous so delayed disembursements occurred when the process was not followed in a timely way.

It is fully recognised that the administrative systems in Latin American institutions are typically burdensome and difficult to change, and the problems are often attributed to the

'system'. But once they were identified, the causes should have been corrected or ways to optimise working within the system discerned, and leadership empowered to take and execute the necessary decisions. This would have required much stronger institutional commitment to the project than was actually forthcoming. As it was, the complex of problems which arose was probably a stronger constraint to fuller participation than an inadequate recognition system at the institutional level, which was adduced by some faculty as an important reason. Nevertheless, there may be a case for revising internal incentives in the partner institutions so that research, extension and teaching activities are suitably balanced in the reward system, both for full-time and part-time faculty members.

An interesting feature of the project is that the monitoring and evaluation activities built into it, which seemed adequate on paper, turned out to be ineffective. There is clear consensus that the problems at the UADY did not diminish in the third year, and may in fact have increased. They were identified early on in the life of the project, discussed at the highest level by Cornell and UADY participants after year one and at the HED in year two. On the other hand, they were dealt with quite summarily in the HED reports, and their real dimensions were generally underplayed. The reports were drafted by Cornell faculty with, understandably, a certain degree of reticence, but there was typically limited input from Mexican participants who might otherwise have used them to bring pressure to bear on their own institutions to take required action. Recognising that political and personal relationships generally come into play in such circumstances, perhaps especially in Latin American institutions, this would have required strong leadership and concerted support among the participants. The fact that neither the frequent reports to the HED, nor the external review had any significant effect should raise questions for the donors as well as the participants, since these activities have a very high opportunity cost. A more effective strategy might have been to rely heavily on internal evaluations. This would include the routine evaluation of all project activities (which was actually not done), and the regular workshop-type internal evaluations (such as that held in Veracruz in July, 2006), provided there is full participation of those responsible (at least at a national level) and continuous follow-up of corrective measures.

#### 5. Conclusions and Recommendations

- 5.1 The objectives of this project have been met partially. The most important benefits probably accrued to the participating *individuals*, especially those who visited Cornell, and to the Mexican *institutions* by providing experience in the advantages and prerequisites for successful international collaboration on projects with strong teaching components. Otherwise, institutional benefit is judged to have been moderate so far, and farm level impact very limited, but benefits in both these areas can still be obtained, even after the project's closure.
- 5.2 The limiting factors stemmed mainly from insufficient institutional support for the project at the UADY and administrative incompatibilities between the partner institutions. This is partly understandable given the novel characteristics of the project. The experience suggests that the successful operation of such collaborative efforts in future requires that:

- a) A careful process to determine whether such a project is in each institution's best interest and, as such, commands sufficient base-level support and disposition to ensure operational feasibility, should be a prerequisite for initial commitment.
- b) Administrative incompatibilities between the partner institutions which might seriously affect project operation should be foreseen at the planning stage. Partners should work together to find solutions which will permit satisfactory operation. Cornell can play a valuable role here by detecting potential areas of conflict and helping to seek viable options before new agreements are signed.
- c) Responsibilities of all parties are clearly defined, especially for those in leadership roles, who should be empowered to carry out their role effectively.
- d) An effective monitoring and evaluation process is in place, with accountability ensured at all levels. All project activities should be evaluated. Fully participative internal evaluations, carried out at regular intervals and with systematic follow-up, seem more likely to bring about the necessary changes than formal reporting. Donors might consider whether their reporting requirements should be reduced and modified to make space for such a process.
  - 5.3 The benefits outlined (5.1) will have made this project worthwhile, despite its limitations, provided that a) the project's outputs continue to be exploited after its closure and b) the lessons learned are put to use in future. In this context, the present report will only be useful if it serves as a stimulus for internal discussion (eg in a workshop type forum), and if the conclusions from the internal discussion are documented to serve for institutional memory. At the very least, such an analysis should be done within each institution, with participation of those responsible at all levels, and those who presently occupy the corresponding administrative positions.

#### Acknowledgements

The author would like to thank all those who took the time and trouble to send their opinions. Without their help, this report could not have been prepared.

#### **Annex 1: Request for views from participants**

(This questionnaire was circulated by e-mail to professors, researchers and graduate students, with a simpler version for undergraduates. A separate covering letter, inviting responses, was prepared for each group)

## Second external evaluation of Cornell-UADY-UV-INIFAP-TIES project: Request for views of participants

As a starting point, would you please be kind enough to provide your comments on the progress of the project in this final year. The following questions may be used as a guideline, but **comments on any other issues are welcomed.** All information you send will be treated in TOTAL CONFIDENCE. For convenience, please write your comments in Spanish or English on this same document, if that would be easier, and return BEFORE JUNE 24.

Como punto de partida, mucho les agradecería enviarme sus comentarios sobre el progreso del Proyecto en éste, su ultimo año. Las preguntas formuladas abajo solamente deben considerarse como guía, y sus opiniones sobre cualquier otro aspecto serán bienvenidas. LA INFORMACION ENVIADA SERA TRATADA DE MANERA TOTALMENTE CONFIDENCIAL. Para facilitar su repuesta, por favor escriba su comentario en ingles o español sobre este mismo documento y devuelvamelo ANTES DE 24 DE JUNIO.

1. Have the original goals of the project (see below\*) been reached satisfactorily in your opinion? If not, what are the probable causes?

Hasta que punto han sido cumplidos satisfactoriamente los objetivos originales del Proyecto (ver abajo\*)? De no ser así, cuales son las causas probables?

2. There have been frequent reports to HED on the project's progress, and at least one internal\*\* and one external review (conclusions and recommendations annexed below for convenience)\*\*\*. Have these described the project's achievements fairly? In this final year, do you consider that progress has been maintained/improved? Have the participating institutions been able to correct any weak points identified in the above mentioned documents – or acted upon any of the recommendations? Please give examples, if possible, and attempt to explain the reasons.

Este proyecto ha sido sometido a frecuentes informes al HED y al menos una evaluación interna \*\* y una externa (las conclusions y recomendaciones de ésta estan anexadas abajo \*\*\*). En su opinión, estos documentos descrben de manera justa y razonable los logros del proyecto? En este año final, se ha mantenido/mejorado el progreso? Las instituciones participantes han corregido algunos de los puntos débiles identificados en los informes o adoptado algunas de las recomendaciones? Favor dé ejemplos, si es possible, e intente explicar las rezones.

3. Have there been lost opportunities (eg in numbers or 'quality' of participants, dissemination and utilization of outputs, relevance of research topics to farming systems, dissemination/uptake of decision support information to farming communities, or other)? If so, why?

Han habido oportunidades perdidas o no plenamente aprovechadas (ej. en el número o "calidad" de los participantes, diseminación y utilización de los productos del proyecto, relevancia de los temas de investigación a los sistemas de producción vigentes, diseminación y adopción de la información generada de apoyo a los sistemas de producción, u otras)? De ser así, porque?

4. Has the project influenced the capacity of the Mexican participating institutions to enter into new cooperative projects (ie since last year) at the <u>national</u> or <u>international</u> level? How are they placed in this respect for the future? Has the UADY-UV-INIFAP participation led to new cooperation between these institutions? Please specify, and give examples if relevant.

Hasta que punto ha tenido este proyecto impacto sobre la capacidad de las instituciones mexicanas participantes de iniciar nuevos proyectos de cooperación a <u>nivel nacional</u> o <u>internacional</u> desde el año pasado? En este sentido, como estan preparadas para el futuro? La participación UADY-UV-INIFAP en el proyecto ha conducido a nuevas iniciativas de cooperación entre estas instituciones. Por favor, especifique y dé ejemplos, de ser pertinente.

5. How would you assess the cost: benefits of this project to a) the participating individuals b) the participating institutions (Mexico and USA) and c) the local livestock farming community? (defining costs in the broadest sense eg: money, time, effort). Please give examples/explain. What conclusions do you draw?

Como juzgaría usted los costos:beneficios del proyecto para a) los <u>individuos</u> que participaron b) <u>las instituciones</u> participantes ( México, EEUU) y c) <u>la comunidad</u> ganadera local (definiendo "costos" en su sentido mas amplio de dinero, tiempo, esfuerzo etc). Por favor, dé ejemplos y explicar. Cuales son sus conclusiones al respecto?

6. In retrospect, would you recommend changes in this project at the a) design and planning b) operational or c) reporting and evaluation stages? Please specify.

Haciendo un análisis retrospectivo del proyecto, que modificaciones recomendaría usted en las etapas de a) diseño y planificación b) ejecución o c) informes y evaluación? Por favor, especifique.

<sup>\*,\*\*,\*\*\*</sup> The project's objectives and the conclusions of the first external review were annexed to the questionnaires, but are not repeated here as they are set out in Sections 3 and 1, respectively.