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**AVAILABILITY  
AND QUALITY OF  
AGRICULTURAL  
DATA FOR THE  
NEW LANDS IN  
EGYPT**

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## EXECUTIVE SUMMARY

The purpose of this study is to examine the types, quality and completeness of data now being collected on the New Lands, and make recommendations on how to improve the Ministry of Agriculture and Land Reclamation (MALR) data collection system as it pertains to New Lands. This study follows a similar study concerning the availability and quality of agricultural data relating to the Nile valley governorates by the MVE unit of APRP (See Morsy F., 1999). The basic conclusion of that study was that relatively complete and good data on Nile valley farms are available at the village and cooperative level, and a sampling system directed at them should provide reliable data for policy analysis.

Over the past 50 years Egypt has added around 1.5 million feddans to its cultivated area from the approximately 2.7 million feddans of land that it reclaimed in the Nile Delta or developed in the desert. This represents about 20% of current cultivated area. As more land is reclaimed and developed, questions persist as to whether expansion or providing more services to existing cultivated areas is the best approach to agricultural development in Egypt. In addition, the impact of APRP reforms on the New Lands and Old Lands may be different.

To perform the analysis of development and impact issues related to the New Lands requires good quality data on agricultural production and inputs particular to those lands. Separate data are required because the New Lands are quite different from the Old Lands: coarse, sandy soils versus more fertile, heavier to loamy soils in the Delta, different irrigation systems and water sources, fewer services and poorer access to markets, farmers who have less experience in managing these types of soils, and many other differences that affect what is an appropriate crop mix or production technology.

The basic conclusion of this study is that current data on New Lands are biased and very incomplete. They are biased because they are incomplete and also because they are not collected using statistical sampling. The data cover almost no squatters; the data also do not cover a substantial portion of large and small investors, perhaps the most productive farms. Relatively little of the New Lands are covered by cooperatives, villages or the existing administrative statistics system. Reliable data for policy analysis will have to be collected via primary sample surveys devoting a lot of time to preparation of an appropriate sample frame, at least until the MALR system for collecting data on New Lands can be expanded and strengthened or redesigned.

To conduct this study, the study team interviewed farmers, extension agents, cooperative leaders, district level and regional statisticians, horticulture and livestock officers, and governorate sampling directors in five regions: Fayoum, New Valley, Nubaria, Ismailia and North Sinai. Also, heads of the various sectors and central administrations in MALR concerned with data collection and reporting were interviewed. The team also examined the available statistical reports, published and unpublished data, the agricultural census, and any report available on the New Lands.

At the present time there is no complete system for collecting data on the New Lands. Within the existing system, some of the methods used for collecting data on the New Lands are the same

as for the Old Lands, and some are different. MALR collects current agricultural statistics on the Old Lands by means of two parallel systems. One is based on upward reporting of extension agents concerning the farmers under their jurisdiction. Coverage of extension agents in the New Lands, however, is quite limited. The second system for the Old Lands provides supposedly independent estimates of crop area by the Egyptian Survey Authority and objective yields for some important crops obtained by the Directorate of Sampling. Neither of these two services gather much data in the New Lands. For the New Lands the third method used is based on the upward reporting of the Graduate Project Supervisories regarding the farmers under their supervision. This method provides MALR a substantial amount of data, and as a result, the data reported for the New Lands tend to be mostly the data for these project areas.

The team found data on New Lands, as published by the Economic Affairs Sector, to be incomplete, of poor quality, and poorly presented. Apart from the out-of-valley directorates of New Valley, Matruh, Red Sea, North and South Sinai and Noubaria, data reported for the New Lands include only data covering the Mubarak Graduates Project, which accounts for only 25% of land reclaimed since 1988. Reclaimed areas in Nile Valley governorates are classified as old land or are not counted at all.

The incomplete coverage of area, poor quality and poor presentation of available data in official statistics on the New Lands arises from a combination of the following problems and constraints:

- An unwieldy and imprecise definition of New Lands and its inconsistent application;
- Poor coordination at the governorate level between the various entities responsible for reclaiming, developing, serving and reporting on the New Lands;
- Relatively recent expansion of cultivated area into lands not previously settled and some of which are not covered by any administrative structure;
- The administrative structure as it pertains to agriculture was not updated as these New Lands have been reclaimed;
- The Mubarak Graduates Project, one of the largest recipients of reclaimed land, maintains an independent reporting system for agricultural statistics on its participants, not integrated or coordinated with the administrative statistics structure covering the rest of each governorate;
- Inadequate resources and training for covering remote areas, large investors and squatters, who are dispersed and sometimes difficult to identify or access;
- A poor incentive structure within MALR for encouraging its agents to provide good quality data;
- Reliance on guesstimates and adjustments by persons not familiar with the area covered by the data;
- Shifting presentation formats both in the same volume and over time that make comparisons unwieldy, difficult or impossible.

In terms of the data that are actually reported, coverage is best for horticultural crops grown by participants of the Mubarak Young Graduates Project, but the quality of those data is not known. There was no access to data as they are reported up the chain in order to make this determination. There are no horticultural data reported separately for any other New Land areas. It is important to note that the statistical reports do not point out that the published data are only those for the Graduates, which cover no more than 25% of recently reclaimed area. This gives the impression

that the data are more complete than they are. This type of misleading reporting is not uncommon in available data for the New Lands.

Although the Mubarak Graduates Project appears to provide good coverage of graduates and beneficiaries, all of whom fall under its jurisdiction, it has only limited data on small investors because it has responsibility only for some of them. GARPAD also allocates reclaimed land to small investors not supervised by the Graduates Project, and to large investors, all of whom fall under the supervision of the MALR extension service. In addition, squatters settle unallocated land in the hands of the public sector, unsupervised by anyone. MALR provides no current statistics for any of these groups, even though such data would be of tremendous use for policy analysis purposes.

Two opportunities are now available for correcting these problems. The year 2000 agricultural census is now underway. For the first time it will create census reporting clusters that separate new and old lands and make it easier to adopt a definition of New Lands that is more suited to policy analysis. Summary analysis and publication of key stratification variables for each of the reporting clusters by the Economic Affairs Sector (EAS) could provide an excellent sample frame for a sampling approach to gathering data on the New Lands. Therefore, the census, through its sample frame, should provide the vehicle to complete coverage that is lacking in the current New Lands data. This could occur much more quickly and much more cheaply than expanding the existing administrative statistics program to provide better coverage of the New Lands.

The second opportunity is a recent change in administrative structure and leadership of the Economic Affairs Sector. This appears to have presented an opportunity for expanding the responsibility of the Sampling Directorate to include collecting area and cost of production information for the New Lands, in addition to providing more complete coverage for objective yield estimates in these areas as well.

## **Recommendations**

1. EAS should take *immediate action* to ensure that data being collected by the agricultural census includes information on class of holder (graduates, beneficiaries, investor, and squatter) and time since reclamation for the holding. This information is critical for developing a stratified sampling frame for future primary studies on production technologies in the New Lands, and for using current statistics to monitor the progress of reclamation and resettlement efforts. A special effort is required to include data on squatters.
2. EAS should develop a comprehensive, nationwide sampling frame based on the census reporting clusters used in the agricultural census. It should include selected critical information necessary for stratifying each reporting cluster according to a number of likely criteria.
3. As soon as the sample frame permits, MALR should adopt a definition of New Lands that is more focused on lands actually reclaimed as New Lands rather than on the administrative location of the land. This process can be facilitated by grouping reclaimed lands in each governorate into clusters that can be reported on separately, prior to aggregation for the district

or governorate. The agriculture census reporting clusters and the GARPAD project development areas are two sources of information necessary to do this.

4. MALR should activate the national level New Lands Data Coordinating Committee established by an existing ministerial decree, and make sure it includes the governorate agricultural affairs officers. Their administrative status as undersecretaries makes it mandatory that they participate in the national committee. A parallel committee should also be activated at the governorate level, which should also include the agricultural affairs officer for the governorate. The purpose of these committees is to ensure that all New Land areas are fully covered by the administrative statistics on New Lands, and that the data are available and reported at the governorate level by the governorate itself. The committees will ensure that data on the Graduates Project is also reported in this way directly to the individual governorates. The national coordinating committee should have an executive secretary whose task will be to assist the governorate committees in identifying, classifying and clustering New Lands in the governorate for reporting purposes.

5. EAS should expand the duties of the Sampling Directorate to include collection of yield, area and production cost data on crops important to the New Lands. Initially this effort should be directed at those New Land areas which are not now being fully covered by anyone. Eventually this effort should be expanded to include all New Lands and, ultimately, the Nile valley as well.

6. EAS should require the Mubarak Project to report its area and production data to each governorate directly, by season. For those Graduate Project areas falling in more than one governorate, the data collection and coordinating committee that was recommended at that level can work with the Mubarak Supervisories to allocate area and production between the governorates concerned so as to avoid double counting.

7. The statistical reports of the EAS should either report data on graduates as a separate category at the bottom of the tables, or expand the reporting and coverage of New Lands inside of the old valley so that the coverage of the data are clear to the user. The reports should also contain a discussion of reporting period, aggregation procedures and missing or incomplete data. It should adopt a convention for alerting the reader that data are missing or incomplete and not zero.

8. The EAS should engage in a structured program for upgrading the training of all personnel involved in data collection and analysis relating to the New Lands. This training should be targeted at the specific sample frame, sampling, measurement and implementation issues the Ministry decides to adopt for collecting data on the New Lands.