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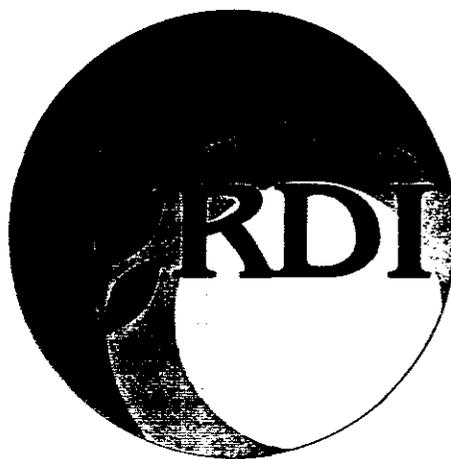
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RDI REPORTS

Report No. 135

*An Economic Valuation of
Public Sector Seed Production:
Privatization, Legal Strategies,
and Policy Issues*

Prepared by:
Roger Poulin

Based on cooperation with:
Lawrence Kent
Dr. Gamal Awad
Gamal Abdel Nasser Al Gamal
Dr. Ahmed El-Beheiry
Counselor Ahmed Hassan
Counselor Mahmoud Fahmy
Dr. Rushdie Haseeb
Ms. Hend Taha

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Abbreviations Used in this Report

APRP	Agricultural Policy Reform Project
ARC	Agricultural Research Center
CASP	Central Administration for Seed Production
CASC	Central Administration for Seed Certification
DCF	Discounted cash flow
EAO	Egyptian Agricultural Organization
Fd	feddan
GOE	Government of Egypt
GTZ	German Technical Assistance Program
HSU	Horticultural Services Unit
LE	Egyptian pounds
MALR	Ministry of Agriculture and Land Reclamation
NPV	Net Present Value
PBDAC	Principal Bank for Development and Agricultural Credit
RDI	Reform, Design and Implementation Unit of APRP

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An Economic Valuation of Public Sector Seed Production: Privatization, Legal Strategies, and Policy Issues

Executive Summary

Objectives

In July 2000 the Chairman of the Principal Bank for Development and Agricultural Credit (PBDAC) requested assistance from RDI/APRP to carry out a **commercial or “economic” valuation** of three public sector seed production organizations to prepare them for privatization. These are the Central Administration for Seed Production (CASP), the Egyptian Agricultural Organization (EAO), and the Horticultural Services Unit (HSU). The plan, as presented by the Chairman, is to combine these three entities into one larger entity for transformation into a large private seed company. The proposed ownership structure is 24% for the Government, 40% for the workers, and 36% for private investors.

A separate government committee was tasked with assessing the “book value” of the assets of these three entities. RDI/APRP was to assess their economic value using two methods: (1) replacement value of all assets, and (2) net present value of discounted cash flow generated from operating these businesses under different scenarios. RDI/APRP was also asked to address legal and policy issues.

Replacement Value of Assets

The study team visited almost all of the assets of the three entities, including CASP and EAO seed processing centers and HSU farms. At each site, the team reviewed the official catalogue of assets listed by the “book value” committee and made adjustments to convert these into replacement values. This involved factoring in depreciation and current market valuations of equipment in similar states of usage. Land was valued conservatively, based on current market values of land in neighboring areas, similarly zoned, and adjusted downward to account for the need to discount land sold in large lots. Based on the above, the replacement value is estimated at LE 139 million for CASP, LE 70 million for EAO, and LE 1,200 million for HSU (land only). The combined **total is LE 1,409 million** of which 94% is in land. It is important to stress that these assets only approach this value if their use is unrestricted, post privatization, i.e. they can be sold off and used for differing purposes. If, post privatization, these assets are restricted to seed production, their value will be much less and better estimated using a discounted cash flow approach.

Net Present Value of Discounted Cash Flow

To use this valuation method the team had to work with the concerned entities to create modified income statements that could be used to calculate the profitability of current operations. These statements revealed that CASP, EAO, and HSU farms lose money on average after factoring in depreciation and factoring out government subsidies. Under scenarios that maintain operations as they are and even scenarios that involve expanded sales, CASP and EAO continue to lose money, resulting in negative net present

valuations (NPV). Only by significantly slashing costs while maintaining sales volume can CASP and EAO be converted into profitable entities. Under one such optimistic scenario (#4), the NPV of CASP and EAO combined is LE 37 million (at a 15% discount rate). As currently operated, the HSU farms have a negative net present value. If, alternatively, this farmland were rented out at LE 1,000 per feddan/year, the resulting cash flow would be worth LE 188 million (at a 15% discount rate over 20 years) – an estimate of the value of the usufruct right of this land for such a period. Under this combination of scenarios, CASP, EAO, and HSU have a combined **NPV of LE 225 million**. The huge gap between this figure and a combined replacement value of 1,409 million poses a challenge to the privatization process. The gap suggests that that seed production may not be the most economic use of all of these assets.

Legal Issues

There are **alternative legal strategies** to consolidate the activities of CASP, EAO, and HSU into one entity and then effect its conversion into a private seed company. The first is to **create a Law 203 public sector company** and then convert it into a private joint stock company under Law 159. This is straightforward, however, may entail transferring control of the privatization process from the Ministry of Agriculture to the Ministry of Public Enterprises. A second approach is to **establish a new private joint stock company with three founding parties**: the Government of Egypt (represented by the Agricultural Research Center), the workers (represented by an employee association), and outside private investors. The assets of CASP, EAO, and HSU would be divided between the ARC and the workers, then both parties would contribute them, in-kind, to the founding of the new company. The private investors would complete the company's capital with a cash contribution, entitling them to ownership of a corresponding percentage of shares. This second approach is complicated; it is presented in more detail in Annexes 5-8.

Policy Issues and Concerns

Three major sets of policy issues are raised by the proposed strategy of transforming CASP, EAO, and HSU farms into "one big private company."

First, given the size and complexity of these three entities and the finding that they lose money on their operations (once subsidies are factored out), **it may be preferable to break them up for privatization purposes**. This would allow investors to purchase and focus on those processing centers and farms that are most economically viable and amenable to management restructuring. This is likely to maximize sales revenues for the government and put these assets to their most efficient economic use.

Second, the "one big company" strategy raises concerns about establishing **monopoly power** in the seed market. CASP currently controls 100% of the market for cottonseed and 65% of the market for wheat and rice seed. CASP also has a legal monopoly on production of registered seed. If a private company inherits such a position, competition and the ability of other companies to remain viable may be threatened. For this reason, a report by RDI/APRP (#101/2000) recommended that: "*the agency be sold as a number*

of separate components rather than as a single entity. This would prevent the creation of a company so large that it would have the power to monopolize the market.” This recommendation was reiterated by the Egyptian Seed Association in a letter to the Minister of Agriculture. The German cooperation agency working in seed (GTZ) has made similar recommendations.

If one large company does emerge from this process, it will be important for the GOE to ensure that **competition** between the new company and other private companies is fair and that no “barriers to entry” are erected administratively to protect the new entity from healthy competition. Such competition, whether from local or international seed companies, benefits farmers. Therefore the GOE will need to ensure that the new company is not given subsidies or regulatory advantages not also open to all companies. For example, the new company should not inherit CASP’s current legal monopoly on the production of “registered” seeds – such production must be open to all qualified companies. Similarly, the new company should not have privileged access to new varieties of crops developed by the Government’s Agricultural Research Center.

A third area of concern is the potential for conflict of interest during **distribution of new varieties**. The introduction of new, improved varieties is one of the best ways a seed company can expand its sales and market share. In Egypt, over 90% of all new varieties of field crops are developed by the Agricultural Research Center, which then licenses them to seed production companies (either private or CASP) in exchange for royalty payments. The ARC’s research and development efforts are considered public services.

Private seed companies are concerned that if the ARC becomes an owner of one seed company, it will tend to license its best new varieties to that particular company, rather than making them available to all companies. The ARC will have a “conflict of interest” that may inhibit it from dealing evenly with all companies. Private companies denied access to the latest ARC varieties would be unable to compete with any company given privileged access.

In 1999, the ARC developed “variety release guidelines” which outlined procedures to be followed by the ARC when offering its new varieties to seed production companies. These guidelines require neutral review of applications for licenses, based on the experience and technical abilities of the applicants, with safeguards to assure that a number of different companies are eventually selected for licenses.

The GOE will need to ensure that these guidelines are implemented strictly to promote competition among a number of seed companies. Neutral implementation, however, may be undermined by ARC ownership of one of the competing companies – namely the newly privatized entity. It may be preferable, therefore, for ARC to avoid taking a direct ownership position in any one company. If the GOE wishes to hold 24% of the shares of the new company, those shares might be held directly by the Ministry of Agriculture rather than by the ARC.

التقييم الاقتصادي لقطاع إنتاج التقاوي التابع للقطاع العام قضايا التخصص و الاستراتيجيات القانونية و السياسات الملخص التنفيذي

الأهداف:

في يوليو عام ٢٠٠٠ طلب رئيس بنك التنمية و الائتمان الزراعي مساعدة "مشروع إصلاح السياسات الزراعية وحدة تصميم و تنفيذ السياسات" في إجراء تقييم تجاري أو "اقتصادي" لثلاث هيئات حكومية منتجة للتقاوي و ذلك من أجل تمهيد الطريق لتخصصها، وهي الإدارة المركزية لإنتاج التقاوي، و الهيئة الزراعية المصرية، و وحدة الخدمات البستانية. و تطوي الخطة التي قدمها رئيس البنك على دمج تلك الكيانات الثلاثة في كيان واحد كبير، تمهيدا لتحويله إلى شركة خاصة كبيرة لإنتاج التقاوي. و يشمل هيكل الملكية المقترح حصول الحكومة على ٢٤% من الأسهم، و حصول العمال على ٤٠% و حصول بقية المستثمرين على ٣٦%.

وقد عهد إلى لجنة حكومية منفصلة بمهمة تقييم القيمة الدفترية لأصول تلك الهيئات الثلاثة. كما عهد إلى "مشروع إصلاح السياسات الزراعية وحدة تصميم و تنفيذ السياسات" بمهمة إجراء تقييم اقتصادي باستخدام طريقتين ألا و هما:
قيمة الإحلال الخاصة بكل الأصول و أسلوب صافي القيمة الحالية للتدفقات النقدية المخصومة الناتجة عن تشغيل هذه الهيئات باستخدام سيناريوهات مختلفة. فضلا عن هذا فقد طلب من "مشروع إصلاح السياسات الزراعية وحدة تصميم و تنفيذ السياسات" تناول القضايا القانونية، و السياسات المرتبطة بذلك.

قيمة إحلال الأصول

زار أعضاء فريق العمل معظم الأصول التابعة لتلك الهيئات الثلاثة، بما فيها محطات الغربلية التابعة لكل من الإدارة المركزية لإنتاج التقاوي، و الهيئة الزراعية المصرية، بالإضافة إلى مزارع وحدة الخدمات البستانية. و في كل موقع قام أعضاء فريق العمل باستعراض القوائم الرسمية للأصول و المعدة بواسطة اللجنة الخاصة بتحديد القيمة الدفترية. كما قاموا أيضا

بإجراء بعض التعديلات لتحويل هذه القيم الدفترية هذه إلى قيم إحصائية وقد تضمن هذا استخدام نسب الإهلاك و تقييمات السوق الحالية الخاصة بالمعدات في مراحل استخداماتها المختلفة. وقد تم تقييم قيمة الأرض بتحفيز على أساس قيم السوق الحالية للأراضي المجاورة و الواقعة داخل النطاق ذاته. ثم تم تخفيض قيم الأرض هذه مراعاة للحاجة لإجراء خصم عند بيع مساحات كبيرة من الأراضي. و بناء على ما تقدم تم تقدير قيمة الإحلال بمبلغ ١٣٩ مليون جنيه مصري للإدارة المركزية لإنتاج التقاوي و ٧٠ مليون جنيه للهيئة الزراعية المصرية ، ١٢٠٠ مليون جنيه لوحدة الخدمات البستانية (بالنسبة للأراضي فحسب). و تم تقدير إجمالي القيمة تلك الكيانات الثلاثة بمبلغ ١٤٠٩ مليون جنيه تمثل الأراضي فيها نسبة ٩٤% و الجدير بالذكر أن تلك الأصول تصل إلى تلك القيم المذكورة سابقاً في حالة عدم تحديد نشاطها في مرحلة ما بعد الخصخصة، أي إذا ما تم بيعها و استخدامها في أغراض أخرى. و من ثم فإذا ما تم تحديد نشاط تلك الأصول في إنتاج التقاوي في مرحلة ما بعد الخصخصة فإن قيمتهم ستخفف إلى حد كبير و على هذا فإن أفضل وسيلة لتقييمها تكون باستخدام أسلوب التدفقات النقدية المخصومة.

صافي القيمة الحالية للتدفقات النقدية المخصصة:

تطلب استخدام هذه الوسيلة قيام الفريق العمل بالعمل مع الهيئات المعنية لوضع قوائم دخل معدلة يمكن استخدامها لحساب الربحية المحققة من العمليات الحالية. و لقد كشفت هذه القوائم أن الإدارة المركزية لإنتاج التقاوي، و الهيئة الزراعية المصرية و وحدة الخدمات البستانية تحقق خسائر على المستوى المتوسط و ذلك بعد احتساب نسبة الإهلاك و استبعاد الدعم الحكومي. و هكذا فإنه في ظل السيناريوهات التي تبقى على الوضع القائم كما هو وحتى في ظل السيناريوهات التي تشمل التوسع في عمليات البيع فإن الإدارة المركزية لإنتاج التقاوي، و الهيئة الزراعية المصرية ستستمران في تحقيق الخسائر، التي من شأنها أن تؤدي قيمة صافية سالبة. و يمكن في حالة تخفيض التكاليف بدرجة كبيرة و الحفاظ على حجم المبيعات يمكن تحويل الإدارة المركزية لإنتاج التقاوي، و الهيئة الزراعية المصرية إلى هيئات تحقق ربحية. وفي ظل هذا السيناريو الذي يتسم بالتفاؤل (رقم ٤) فإن صافي القيمة الحالية السالبة لكل من الإدارة المركزية لإنتاج التقاوي و الهيئة الزراعية المصرية يقدر بنحو ٣٧ مليون جنيه مصري (بمعدل خصم ١٥%). فضلاً عن هذا فإن مزارع وحدة الخدمات البستانية وقفا لأسلوب تشغيلها الحالي تحقق قيمة صافية سالبة. وبدلاً لذلك ما تم تأجير أراضي المزرعية بمبلغ ١٠٠٠ جنيه في السنة فإن التدفقات النقدية الناتجة ستساوي ١٨٨ مليون جنيه

(بمعدل خصم ١٥% على مدار ٢٠ عاما) و هو تقدير لقيمة حق الانتفاع لهذه الأرض على مدار هذه الفترة. وفي ظل مجموعة السيناريوهات هذه فإن كل من الإدارة المركزية لإنتاج التقاوي، و الهيئة الزراعية المصرية، و وحدة الخدمات البستانية لديهما قيمة صافية سالبة تقدر بمبلغ ٢٢٥ مليون جنيه مصري. لذا فإن الفجوة الشاسعة بين هذا الرقم و قيمة الإحلال المجمع و المقدرة بمبلغ ١٤٠٩ مليون جنيه تطرح تحديا على عملية الخصخصة برمتها. و تكشف هذه الفجوة أن إنتاج التقاوي قد لا يكون هو الاستخدام الاقتصادي الأمثل لكل هذه الأصول.

القضايا القانونية:

هناك عدة إستراتيجيات القانونية بديلة التي من شأنها أن تضم أنشطة كل من الإدارة المركزية لإنتاج التقاوي، و الهيئة الزراعية المصرية، و وحدة الخدمات البستانية في كيان واحد ثم تحويل هذا الكيان إلى شركة خاصة منتجة للتقاوي. أول هذه البدائل هو إنشاء الشركة تحت قانون ٢٠٣ لشركات القطاع العام، ثم تحويلها إلى شركة مساهمة قطاع خاص تحت القانون ١٥٩. و هذا البديل هو أقصر الطرق، إلا أن هذا قد يؤدي إلى تحويل عملية الخصخصة من سلطة وزارة الزراعة إلى سلطة قطاع الأعمال العام. و هناك بديل آخر تنطوي على تأسيس شركة مساهمة خاصة كبيرة تتكون من ثلاثة أطراف مؤسسة و هي: الحكومة المصرية (ممثلة في مركز البحوث الزراعية) و العمالين (ممثلين في اتحاد العاملين و مستثمري القطاع الخاص. و يتم تقسيم أصول الإدارة المركزية لإنتاج التقاوي و الهيئة الزراعية المصرية و وحدة الخدمات البستانية بين مركز البحوث الزراعية و العمالين ثم يقوم كل طرف بالمساهمة عينيا لتأسيس الشركة الجديدة. و يقوم مستثمرو القطاع الخاص بإستكمال رأس مال الشركة بالمساهمات النقدية، التي تمنحهم حق ملكية نسبة أسهم مساوية لمساهماتهم في الشركة. و يعد هذا البديل الثاني معقداً و هو موضحاً بالتفصيل في الملاحق من ٥ إلى ٨.

قضايا و هواجس السياسات:

توجد ثلاث مجموعات من قضايا السياسات الناشئة نتيجة الاستراتيجيات المقترحة لتحويل الإدارة المركزية لإنتاج التقاوي، و الهيئة الزراعية المصرية، و مزارع وحدة الخدمات البستانية إلى شركة خاصة كبيرة.*

أولاً: بالأخذ في الاعتبار حجم و درجة تعقيد تلك الهيئات الثلاثة والخسارة التي يحققونها (عند استبعاد الدعم) فقد يكون من المفضل تقسيمها الشركة المقترحة لإغراض الخصخصة.

و هذا من شأنه أن يسمح للمستثمرين بالشراء و بالتركيز على محطات الغريبة ذات الجدوى الاقتصادية و القابلة لإجراء عمليات إعادة الهيكلة الإدارية. و من المتوقع أن يعظم هذا من عوائد المبيعات للحكومة فضلا عن استغلال تلك الأصول بشكل اقتصادي أكثر كفاءة.

ثانيا: إن استراتيجية تأسيس "شركة خاصة واحدة كبيرة" يثير الشكوك حول احتكار مثل هذه الشركة لسوق التقاوي. وتتحكم الإدارة المركزية لإنتاج التقاوي حاليا بنسبة ١٠٠% من تقاوي القطن بالسوق ونسبة ٦٥% من نسبة تقاوي القمح و الأرز. كما أن لدى الإدارة المركزية لإنتاج التقاوي احتكار قانوني لإنتاج التقاوي المسجلة. و من ثم فإذا ما استحوذت شركة قطاع خاص علي هذه المكانة فإن هذا من شأن ذلك أن يمثل تهديدا بقدره للشركات الأخرى علي المنافسة و الاستمرارية داخل السوق. و لذا فلقد أوصى التقرير رقم (#٢٠٠٠١١٠١) الذي أصدره "مشروع إصلاح السياسات الزراعية/وحدة تصميم و تنفيذ السياسات" ببيع الهيئة علي شكل عدة وحدات منفصلة بدلاً من كونها كيان واحد. ويتجنب هذا إنشاء شركة كبرى لديها القدرة علي احتكار السوق" ولقد كررت الجمعية المصرية التقاوي المصرية نفس هذه التوصية في خطاب منها إلى معالي وزير الزراعة. فضلا عن هذا فإن و كالة المعونة الألمانية GTZ المشتغلة بمجال التقاوي قد توصلت إلى نفس هذه التوصية.

وبناء علي ما تقدم فقي حالة إنشاء شركة واحدة كبيرة فسيكون من الضروري علي الحكومة المصرية أن تضمن عدالة المنافسة بين الشركة الجديدة و الشركات الخاصة الأخرى، وألا يتم "وضع حواجز إدارية علي دخول السوق" لحماية الشركة الجديدة من المنافسة السليمة. فتلك المنافسة سواء كانت من جانب شركات إنتاج التقاوي المحلية أو العالمية هي في صالح المزارعين. و من ثم لابد للحكومة المصرية أن تضمن عدم منح الشركة الجديدة أي دعم أو ميزات متعلقة باللوائح لا تمنح للشركات الأخرى أيضا. وعلى سبيل المثال فيجب ألا تهرث الشركة الجديدة الاحتكار القانوني الخاص "بالتقاوي المسجلة" الممنوح للإدارة المركزية لإنتاج التقاوي، فإن إنتاج مثل هذه التقاوي لابد و أن يكون متاحا لكل الشركات المؤهلة لذلك. و أيضا لابد ألا يكون للشركة الجديدة وحدها علي ميزة الحصول علي الأصناف الجديدة من المحاصيل التي ينتجها مركز البحوث الزراعية.

و أحد القضايا الأخرى مثار الاهتمام في هذا الصدد هي مسألة تعارض المصالح أثناء توزيع الأصناف الجديدة حيث أن إنتاج أصناف جديدة محسنة هي أحد أفضل الوسائل التي تستطيع من خلالها أي شركة منتجة للتقاوي أن تزيد من مبيعاتها و حصتها داخل السوق. و قي مصر

يأتي إنتاج أكثر من ٩٠% من الأصناف الجديدة الخاصة بالمحاصيل الحقلية من مركز البحوث الزراعية، الذي يقوم بدوره بمنح التراخيص للشركات المنتجة للتقاوي (سواء الشركات الخاصة أو الإدارة المركزية لإنتاج التقاوي) مقابل مبالغ تمنح لشراء حقوق الملكية. وتعد جهود مركز البحوث الزراعية للتنمية خدمات عامة. مدعومة من الحكومة

وتخشى الشركات الخاصة إنتاج التقاوي من أنه إذا ما أصبح مركز البحوث الزراعية كالشركة من شركات إنتاج التقاوي، فسيكون من الطبيعي أن تمنح التراخيص الخاصة بأفضل أصنافها إلى تلك لشركة على وجه الخصوص بدلاً من توفيرها لبقية شركات التقاوي. وذلك لأن مركز البحوث الزراعية سيواجه "تعارضاً في المصالح" في هذا الصدد من شأنه أن يمنعه من التعامل بشكل عادل مع شركات إنتاج التقاوي الأخرى. ومن ثم فإن شركات إنتاج التقاوي الخاصة التي ستحرم من الحصول على الأصناف الجديدة التي ينتجها مركز البحوث الزراعية لن يمكنها منافسة الشركة التي تحصل على الأصناف الجديدة.

وقد قام مركز البحوث الزراعية في عام ١٩٩٩ بإصدار سياسة عامة لإطلاق الأصناف الجديدة شرح فيها الإجراءات التي سيتبناها المركز في منحه للأصناف الجديدة للشركات المنتجة للتقاوي. وتتطلب هذه السياسات المراجعة الحيادية للطلبات المقدمة للحصول على تراخيص على أساس الخبرة و القدرات الفنية للمتقدمين بالطلبات مع وضع بغض الشروط التي من شأنها ضمان اختيار عدة شركات للحصول على التراخيص.

وتحتاج الحكومة المصرية إلى ضمان تطبيق هذه السياسة سيتم تطبيقها بشكل حازم وذلك لضمان زيادة المنافسة بين مجموعة الشركات الخاصة المنتجة للتقاوي. إلا أن التطبيق الحيادي لهذه السياسة هذه الإرشادات قد يقوضه ملكية مركز البحوث الزراعية لواحدة من تلك الشركات وهي الشركة المقترح خصصتها حديثاً. لذا فمن المفضل ألا يكون لمركز البحوث الزراعية ملكية مباشرة في أي شركة تجارية. وإذا ما رغبت الحكومة المصرية في الاحتفاظ بنسبة ٢٤% من الأسهم الخاصة بهذه الشركة الجديدة فيحسن أن تكون الملكية مباشرة لوزارة الزراعة وليس مركز البحوث الزراعية.

Background

The seed industry in Egypt is a mixture of public and private sector activities. There are three key public sector organizations. The Agricultural Research Center (ARC) is the main source of new seed varieties in Egypt and is responsible for producing breeder and foundation seeds for all of the varieties it develops. It grows breeder and foundation seeds on its own farms and processes those seeds in its own seed processing stations. The Central Administration for Seed Certification (CASC) is responsible for the certification of all seeds used in Egypt and the licensing of seed production companies and seed traders. The Central Administration for Seed Production (CASP) processes all of the certified cotton seeds, all of the registered seeds of varieties developed by ARC, and a large percentage of certified seeds of open pollinated varieties of major field crops, notably wheat and rice. The private sector is dominant in the development and production of hybrid maize and vegetable seeds, and is gradually increasing its production of open pollinated varieties of field crops, although CASP has recently significantly increased its processing and sales of hybrid maize seed.

Although seed breeding and certification will remain in the public sector for the foreseeable future, efforts have been underway for some time to privatize seed production. Until recently, the effort has focused on privatizing the CASP seed processing stations. CASP operates 14 stations, including a cotton acid delinting plant in Sakha. The privatization effort has now been expanded to include two other organizations: the Egyptian Agricultural Organization (EAO) which owns nine seed processing stations, although only three are fully operational at this time, and the Horticultural Services Unit (HSU), which is affiliated to the ARC and manages a number of state farms. Rather than privatize these activities piecemeal, the Ministry of Agriculture and Land Reclamation (MALR) has decided to privatize the entire government seed production sector as one entity.

The Government Seed Production Sector

The Organizational Structure

The organizational structure of the three organizations to be privatized can be summarized as follows:

- The Horticultural Services Unit (HSU) was formed in 1992 under Ministerial Decree 1030/92 as a "unit of special nature" affiliated to the Agricultural Research Center (ARC) to provide services, consultation and research for MALR. HSU is governed by a Board of Directors appointed by the Minister of Agriculture. The Chairman of the Board is also the CEO. The Board of Directors approves the annual budget and determines how any profits are to be allocated. Ministerial Decree 309/93 placed all ARC production farms under the technical, financial and administrative supervision of HSU, and Ministerial Decree 861/93 transferred the Sakha, El Qosia and Beshel farms to HSU. Presidential Decree 19/1994 transferred the activities of mechanical agriculture and agricultural production of the Public Company for Agricultural Production and Services to ARC. These activities were later transferred to HSU. At the present time, HSU's main economic activity is the operation of about 40 state farms.
- The Central Administration for Seed Production (CASP) was formed in 1995 under Ministerial Decree 926/95 which divided the Central Administration for Seeds (CAS) into two organizations, one for seed production (CASP) and one for seed certification

(CASP). CASP is a central administration of MALR subject to all governmental rules and regulations. The head of CASP is a civil servant appointed by the Minister. CASP's budget is approved by the Ministry of Finance and its revenues must be deposited in government accounts with any excess funds returned to the Ministry of Finance at the end of the fiscal year. CASP's main economic activity is the processing of seeds at its 14 seed processing stations.

- The Egyptian Agricultural Organization (EAO) was organized as a General Authority established by Presidential Decree 1925/1967. As a General Authority, EAO is an autonomous economic organization governed by Law 61/1963. The Board of Directors is appointed by the Minister of MALR. EAO has its own salary structure, its budget is approved by the Board of Directors, and its financial system follows the same "unified accounting standards" used by private sector corporations. Profits are returned to government and losses are carried over until the next year. EAO's main economic activities at this time are the operation of an Arabian horse farm and trading in agricultural commodities to meet government needs. Its nine seed processing stations are now under CASP management.

In late 1996 and early 1997, all government seed processing activities were placed under the technical, financial and administrative supervision of the HSU. First, Ministerial Decree 1541/96 assigned the supervision of all EAO seed production to HSU. Then, Ministerial Decree 1542/96, assigned the supervision of all EAO seed production, except for the Tanta and Bahteem seed processing stations, to CASP. Finally, Ministerial Decree 47/97, dated 1/18/97, assigned the supervision of all CASP seed processing activities, including the recently transferred EAO stations, to HSU. In addition, the HSU farms produce registered and certified seeds that are processed by CASP, as well as foundation seeds processed by the ARC in its own processing stations. The final result is a horizontally and vertically integrated government seed production sector under the overall supervision of the HSU.

Description of the Three Organizations to be Privatized

CASP

CASP is the centerpiece of the seed production sector that is being privatized. Its 14 seed processing stations are listed in Table 1. These stations have a total processing capacity of 86 tons per hour, or a potential of 275,000 tons a year if they were to operate two 8-hour shifts, 200 days a year (100 days each for the summer and winter growing seasons). As can be seen from Table 2, CASP processes mainly cotton, wheat and rice seeds, and lesser quantities of faba bean, barley, lentil and soybean seeds. CASP has a monopoly in two seed products at this time: registered seeds of varieties released by ARC and certified cotton seed. In addition, although the processing of all certified seeds except cotton has been open to the private sector since 1994, CASP has the dominant market position for virtually all open pollinated varieties of major field crops.

Although officially a part of the MALR, CASP operates as a national public sector seed production company. Its headquarters in Cairo has six departments with a staff of about 200:

- Production: responsible for assuring the supply of raw seeds for the processing plants.
- Ginning and milling: responsible for assuring the ginning and milling of cotton seed to be processed.
- Processing: oversees the operation of the seed processing stations.
- Commercial: tracks sales and costs, sets sale prices, and prepares crop final statements.
- Finance sets annual budgets and maintains financial records.
- Marketing: conducts market research and prepares marketing plans.

Location	Governorate	Capacity (T/hr) ¹
Sakha, cotton delinting	Kafr El Sheik	7
Sakha	Kafr El Sheik	13
El Gemaiza	El Gharbya	3
So. Tahrir	El Beheira	6
Nobaraya	El Beheira	6
Salheya	El Sharkiya	6
Kafr Sakr	El Sharkiya	5
Shirbin	Daqhaliya	5
Qesna	Menoufya	6
Kafour El Nil	El Fayoum	6
Sids	Beni Suef	5
Shousha	El Minya	5
Beni Ghaleb	Assuit	6
El Kharga	Wadi El Gedid	7
Total		86

Crop	Total Sales	CASP Sales	Market Share (%)
Cotton	187,243	187,243	100
Wheat	348,052	262,194	75
Rice	168,337	109,004	65
Faba bean	13,352	8,663	65
Barley	1,087	1,087	100
Soybean	72	72	100
Lentil	90	90	100

CASP also has offices in each governorate. These offices are mostly administrative. They oversee operations in the field; including purchase of raw seed, the operation of the processing stations, sale of the processed seeds and other products; and track revenues and expenses. Finally, at each of the 14 processing stations there is a station manager, permanent staff and temporary laborers as needed. CASP employs about 7,000: 2,830 permanent, 3,956 temporary, and 220 seconded from other organizations. Budgets are prepared by each station for each crop, but actual operations are highly centralized and financial records and final crop statements are maintained only at the national level.

The EAO Seed Processing Stations

The EAO seed processing stations are listed in Table 3. Two of the stations, Shoubra and Wadi El Nil, have been closed for some time and no longer have any staff. The station at Miniya is also closed, although there are still staff assigned to that station. The remaining six stations have a combined total of 208 employees. As previously noted, these stations are under CASP management. EAO as an organization has no managerial or operational responsibilities with respect to these stations. CASP decides what is to be processed, receives the revenues from the sale of the seeds and pays all of the processing expenses,

¹ This is the capacity as estimated by CASP rather than the designed capacity specified by the manufacturer.

both direct and indirect. Although, overall, the EAO stations are operating at only seven percent of designed capacity, they account for a significant portion of total CASP production. Over the last three years the EAO stations have accounted for about 30 percent of the wheat, rice and cotton seed processed by CASP. Most of the production has been at the Bahteem and Tanta stations.

Station	Governorate	Capacity (T/hr)
Tanta	El Gharbiya	25
Mansoura	El Dakhaleya	1
Damanhoar	El Beheira	1
Bahteem	Qalubeya	10
Bahteem	Qalubeya	1
Shoubra	Qalubeya	closed
Wadi El Nil	Qalubeya	closed
El Minya	El Minya	closed
Daruit	Assuit	1
Total		39

The HSU Farms

HSU is governed by a Board of Directors whose Chairman is also the Chief Executive Officer. The organization is divided into nine departments: field crop production, horticultural production, nurseries, livestock production, ornamental plants, pest management, financial affairs, commercial affairs and administrative affairs. HSU's main activity in the management of 40 state farms, all of which are to be privatized as part of the seed production sector. Sixteen of these farms totaling 15,333 feddan grow field crops, 10 farms totaling 337 feddan grow horticultural crops, and 14 farms totaling 6,463 feddan grow a combination of field and horticultural crops. The total area is 22,133 feddan, of which almost 19,000 feddan is located in the delta. HSU has a staff of about 3,500 permanent employees and 2,500 temporary laborers. All of HSU is to be privatized except for a number of relatively minor activities, including: livestock production, ornamental gardens, and the experimental activities that it carries out for MALR, notably related to pest management.

From the standpoint of seed production, the most important assets are the field crop farms. Six of these farms, totaling over 10,000 feddan are at one location in Sakha, Kafr El Sheik Governorate. As can be seen from Table 4, since 1997 when seed processing was placed under HSU supervision, CASP has been purchasing a steadily increasing percentage of its raw seeds from HSU.

Crop	1997/98		1998/99		1999/2000	
	Total	HSU	Total	HSU	Total	HSU
Cotton	368,612	2,865	280,000	6,645	252,341	10,241
Rice	178,086	45,143	223,785	44,182	208,570	61,274
Wheat	341,734	39,982	398,730	40,411	392,206	53,167
Faba bean	12,898	-	16,464	4,812	6,640	3,036
Barley	6,664	6,314	598	598	3,424	1,903

² Source: AudioConsult, A Report on the Status and Feasibility of Activities Conducted by HSU, Dec. 2000.

Financial Performance

CASP

CASP's financial performance over the last three years is summarized in Table 5. Since CASP does not keep its accounts according to generally accepted accounting principles, it is not possible to match revenues with expenditures, nor is it possible to assure that all expenses have been accurately categorized. Because CASP's financial records are not complete, many of the figures are internally inconsistent and cannot be reconciled or verified. The accounts are maintained on a cash rather than an accrual basis, so these tables show cash inflows and outflows in each year rather than actual profits or losses from operations. However, the figures in Table 5 can be considered a close approximation of funds received and expended by CASP in each of the last three years.

Table 5 – CASP Modified Income Statement
(LE millions)

	1997/98	1998/99	1999/2000
Sales	172.5	144.9	186.4
Cost of Goods Sold			
Raw materials	102.1	92.9	103.0
Salaries, wages and incentives	10.2	12.4	20.0
Non-labor other costs	28.6	26.6	28.4
Depreciation	6.5	6.6	6.8
Total	147.3	138.5	158.2
Gross Profit	25.2	6.4	28.2
General and Admin. Expenses			
Government salaries – Ch.1	15.5	18.4	19.5
Government non-labor expenses – Ch. 2	1.6	0.3	0.4
Non-government labor costs	0.7	0.8	1.2
Non-labor other costs	6.5	6.8	12.2
Total	24.3	26.3	33.3
Operating Profit	0.9	-19.9	-5.1
Interest	0.6	0.5	0.4
Net Profit	0.3	-20.4	-5.5
Memorandum:			
Government funding	17.1	18.7	19.9

Three adjustments made to the figures provided by CASP should be noted. First, none of the expenses paid for by the government, mostly salaries, were included in the statements received from CASP. These were obtained from other sources then added to the general and administrative expenses reported by CASP. Second, depreciation costs were added based on the value and age of assets as presented in the Seed Sector Valuation Committee Report. Third, expenditures of LE 22.9 million were excluded from the line item "government non-labor expenses" because these expenditures were used for raw materials to be held in inventory for use in the following crop year (2000/2001).³

³ To compensate CASP for selling cotton seed at a low official price, the Government paid CASP LE 22.9 million, which the organization rightly booked as sales revenues. CASP then quickly used this cash to purchase raw materials for the following season, in order to avoid having too much cash on hand (which might have to be transferred to the Treasury).

The table shows that in 1999/2000 CASP incurred a loss of LE 5.5 million on sales of LE 186.4 million. Over the last three years, annual losses averaged LE 8.5 million on average sales of LE 168 million, or a profit margin of negative five percent. Because accounts are kept on a cash rather than accrual basis, it is likely that actual sales in 1998/99 were higher than shown and sales in 1999/2000 and possibly 1997/98 were lower than shown. Although it is not possible to draw any firm conclusions about trends from these figures, it appears that CASP has been able to achieve reductions in unit costs of goods sold while experiencing increases in general and administrative expenses relative to volume of sales. Given that CASP's labor costs are widely considered to be excessive, it appears that the organization is not far from breaking even or becoming slightly profitable. It is a long way, however, from providing a competitive rate of return on its substantial capital assets.

EAO

The following table provides an estimate of net profits from EAO's seed processing operations over the last three years. These figures should be considered as a rough approximation of what actually occurred. As previously noted, EAO no longer has responsibility for processing seeds.

	1997/98	1998/99	1999/2000
Revenues			
Seed processing for CASP	2.1	2.1	2.2
Miscellaneous revenues	0.4	0.3	0.4
Revenues from external sources	0.2	0.5	0.1
Total	2.7	2.9	2.7
Cost of goods sold			
Wages	3.6	4.4	5.5
Commodities	0.4	0.6	0.2
Services	0.4	0.3	0.3
Transferred expenses	0.9	1.1	1.0
Total	5.2	6.4	7.0
Gross profit	-2.5	-3.5	-4.3
General and Admin. Expenses			
Wages and salaries	1.1	0.1	0.1
Commodities	0.1	0.1	-
Services	0.2	0.1	0.1
Transferred expenses	1.1	2.2	2.6
Provisions	0.6	0.2	-
Unusual expenses	-	0.8	0.1
Total	3.1	3.5	2.9
Net profit	-5.6	-7.0	-7.2

Its stations have been transferred to HSU and are being managed by CASP. Since CASP has more than enough capacity in its own stations to meet all of its requirements, there is no need to process any seeds at the EAO stations. HSU has apparently decided, however, that approximately 25 percent of the total quantity of seeds processed by CASP will be processed at the EAO stations. CASP sends raw seeds to EAO stations for processing; EAO and CASP calculate the cost of processing the seeds; and CASP pays those costs. The most difficult problem in preparing these tables was deciding what portion of EAO expenditures, both operational and general and administrative, should be allocated to seed

processing. As can be seen from Table 6, the study team's best estimate is that the expenses associated with the seed stations total approximately LE 8 million, whereas processing seeds for CASP generates about LE 2 million in revenues. Assuming that the LE 2 million in revenues from CASP approximates the variable costs of processing the seeds, EAO would be incurring LE 6 million in expenses even if the stations were not processing any seeds. The assumptions used in arriving at these estimates are explained in detail in Annex 10.

HSU Farms

HSU as a governmental body maintains its financial records in the same manner as CASP. Therefore, the caveats noted above with respect to CASP data apply to HSU as well. Table 7 below as well as all of the tables in Annex 11 have been reconstructed from data provided by the HSU Financial Affairs Department. Some of the data pertained to individual farms whereas other data was aggregated at the national level. In many cases it was impossible to reconcile the two. However, the final figures as presented in this report represent a reasonable approximation of cash inflows and outflows in each of the past three years.

	1997/98	1998/99	1999/2000
Sales revenues	18.5	33.0	43.0
Miscellaneous revenues	14.3	8.7	12.1
Total revenues	32.8	41.7	55.1
Cost of goods sold			
Non-government wages and incentives	7.3	7.5	9.4
Commodities	7.0	12.5	11.7
Services	13.1	19.0	22.1
Total	27.4	39.0	43.2
Gross profit	5.4	2.7	11.9
General and Admin. Expenses			
Government wages	12.4	11.2	12.1
Non-government labor costs	4.4	0.5	3.2
Commodities	5.6	0.5	0.2
Services	1.2	1.2	5.4
Current transfers	0.1	0.1	-
Total	23.7	13.5	20.9
Net profit	-18.3	-10.8	-9.0
Memorandum:			
Government funding for salaries	12.4	11.2	12.1

Overall, the HSU farms are clearly experiencing substantial losses. They are able to generate a positive cash flow because, first, all of the salaries are paid by government and, second, they do not have to pay any rent for the land. If, for example, HSU were to pay rent of LE 1,000 per feddan per year on 20,000 feddan, the annual cost would be LE 20 million. The trends however, are in the right direction. Sales have been growing at a rapid pace and, with the costs of goods sold growing at a much slower pace, gross profits improved from LE 5.4 million in 1997/98 to LE 11.9 million in 1999/2000. In the general and administrative expense category, government salaries have remained essentially unchanged over three years and other G&A costs have declined slightly.

One bright spot is the seed production of the farms. The full HSU report in Annex 11 presents tables on the revenues and expenses related to seeds. HSU records show that, in

1999/2000, 23 percent of the income generated by the farms to be privatized came from the sale of seeds. In each of the past three years, seed revenues have exceeded the cost of goods sold, so that this part of the farms' operation has experienced small but positive gross profits. Of course, when general and administrative costs are added even the seed operations are generating losses

Valuation

This section presents the two sets of values that must be used to determine the market value of the government seed production sector as an ongoing business. The first is the replacement value of assets. This is equal to what it would cost to replace all of the assets that make up the seed production sector at current prices, adjusted for the accumulated depreciation of those assets. It should be noted that this is different from the market value of the assets, which would be based on the likely selling price of the assets taking into account their location and the effective demand for these assets under existing market conditions. For example, the fact that there is currently an excess of seed processing capacity in Egypt would tend to make the market value of the seed processing stations lower than their replacement value. Also, it will be noted that many of the seed processing stations are situated on highly valuable land. The market price of this land in most cases causes the replacement value of the stations to exceed their market value as seed processing stations.

The second measure of value is the present value of future net cash flows, discounted to reflect the opportunity cost of capital, or the rate of return that could be earned from alternative investments. This is the most accurate measure of the value of a business to an investor. If the investor pays less than this amount the return on his investment will exceed the opportunity cost of capital; if he pays more, his return will be less.

Replacement Value of Assets

The following three tables present the replacement value of the assets of the three units being privatized.⁴ Annex 4 presents the detailed list of assets being privatized as well as the original cost, the depreciated value and the replacement cost of each asset. For the CASP and EAO seed processing stations, the replacement cost was calculated by valuing the assets at existing prices and multiplying these values by the percentage of accumulated depreciation of the original equipment and buildings. The information in these tables, except for land values, was based on the report of the Seed Sector Valuation Committee formed by Ministerial Decree 1238/1998. In preparing this report, all of the facilities were inspected by an agricultural engineer.⁵ Although land values were included in the Seed Sector Valuation Committee Report, they were presented as preliminary estimates to be finalized in the near future by a government committee formed specifically for this purpose. For the purposes of this report, land was valued by estimating the cost per square meter based on recent sales of comparable land in their respective locations.

⁴ Only the productive assets (seed processing stations and farms) of each organization are listed in these tables. Since other facilities owned by these organizations, such as office buildings, warehouses and retail outlets, were not included in the report of the Seed sector Valuation Committee, this report assumes that they are to be excluded from the seed sector privatization.

⁵ For the CASP and EAO tables, the first two columns (the original cost and present book value) were obtained from the draft report of the Seed Sector Valuation Committee and the last three columns were developed by the study team based on site visits. Where the team's assessment of replacement value was close to the value arrived at by the government valuation team, the valuation team's estimate was used.

CASP

The value of each CASP station is presented in Table 8. These stations are all similar in size, age and condition, except for the acid delinting unit in Sakha, and the El Gemaiza station, which is smaller and older than the others. The remaining stations all have a capacity of six to ten tons per hour. Most of them were built in the 1990s, and since they have had relatively little use and have been well maintained, are in exceptionally good condition. Most of the seed processing machines and silos, which are the most costly parts of the station, have experienced virtually no deterioration, which explains why their replacement value is close to and in a few cases higher than their original cost. (See the detailed valuation tables in Annex 4.)

EAO

In valuing the EAO seed processing stations, the Seed Sector Valuation Committee determined that five of the nine stations - El Mansour, El Minya, Dairuit, Wadi El Nil and Shoubra - had only salvage value. It was noted that the equipment in these stations is old and largely dysfunctional, the stations are located in areas where newer CASP stations are capable of meeting local needs, and they are located on urban land that is not only valuable but also residential, thus conflicting with environmental laws.

HSU Farms

Tables 10 and 11 show the value of the HSU farms to be privatized. Fifteen of the farms grow only field crops, nine grow only horticultural crops and the remaining 16 grow both.⁶

It will be noted that these tables show only the value of the land. This is because the study team was not able to obtain information on the buildings and equipment owned by these farms. There is no doubt that these assets will add substantially to the replacement value of the farms. Counting the value of the land alone, the replacement value of the 40 farms totals LE 1.2 billion.

The land value is based on the current sale price of agricultural land at each of the farm locations. It will be noted that the market value of these farms greatly exceeds what can be justified by the rental value of the land. This is difficult to explain, but is partly due to the fact that most agricultural land in Egypt is under pressure from expanding urban areas. Although there are prohibitions against converting agricultural land to residential, commercial or industrial use, waivers are continually being granted as cities expand. The market value of this land, therefore, reflects the fact that some of it will inevitably be converted from agricultural to urban, at great profit to the landowner.

The MALR's stated intention is to sell the smaller farms and lease the larger ones, but the study team was given no list of which farms were to be sold and which ones leased, nor was it given any indication of what the lease arrangements might be. Tables 10 and 11, however, provide the information needed to calculate the replacement value of the farms that would be sold and the rental value of the farms that would be leased. For the farms that would be leased, the asset to be transferred would be the usufruct rights to the land. If, for example, the usufruct rights to the land for all of the HSU farms were to be transferred instead of the ownership, the replacement value of the asset (i.e., the usufruct right) would be the discounted present value of the annual rental income for the period covered by the usufruct right. Assuming an annual rental value of LE 20 million increasing by five percent per year for a period of 30 years, the discounted present value (at a 15 percent discount rate) of the

⁶ In Egypt, the term horticulture refers to orchards. All HSU vegetable production is included in field crops.

annual rents would be LE 188 million. That would be the replacement value (in this case, also the market value) of the usufruct right.

Table 8: Replacement Value of CASP Seed Processing Stations
(LE millions)

	Original Cost	Present Book Value	Replacement Value	Of which: Land	Replace. Value Excl. land
Sakha, cotton delinting	21.6	19.1	20.9	7.7	13.2
Sakha	15.2	9.0	26.2	16.8	9.4
El Gemaiza	0.4	-	7.2	6.9	0.3
South Tahrir	7.9	4.9	8.5	2.1	6.4
Nobaraya	8.8	5.7	11.0	2.3	8.7
Salheya	7.8	4.8	6.3	0.3	6.0
Kafr Sakr	4.8	2.8	7.2	3.4	3.8
Shirbin	5.0	2.9	6.2	2.9	3.3
Qesna	6.9	5.2	8.7	3.8	4.9
Kafour El Nil	4.8	2.3	6.7	2.2	4.5
Sids	7.6	4.7	16.3	10.1	6.2
Shousha	4.5	4.0	4.4	0.1	4.3
Beni Ghaleb	6.5	5.3	6.4	0.0	6.4
El Kharga	3.9	2.5	3.1	0.1	3.0
Total	105.7	73.2	139.2	58.7	80.4

Table 9: Replacement Value of EAO Seed Processing Stations
(LE millions)

	Original Cost	Present Book Value	Replacement Value	Of which: Land	Replace. Value Excl. land
Tanta	12.3	6.8	16.1	4.2	11.9
Mansoura	0.6	0.2	10.1	9.7	0.4
Damanhoar	1.5	0.5	6.2	5.0	1.2
Bahteem	2.7	0.8	8.7	6.4	2.3
Bahteem	1.1	0.3	7.2	6.4	0.8
Shoubra (closed)	0.3	0.1	3.9	3.7	0.2
Wadi El Nil (closed)	0.1	0.1	5.3	5.2	0.1
El Minya (closed)	0.3	0.1	8.8	8.6	0.2
Daruit	0.1	-	3.9	3.7	0.2
Total	19.0	8.9	70.2	52.9	17.3

Table 10 - HSU Field Crop Farms

Location	Governorate	Area (fd)	Value (LE million)	Rent value (LE/fd)
<u>Field crop farms</u>				
Sakha	Kafr El Sheik	1338	66.9	1200
Mahalet Moussa	Kafr El Sheik	458	22.9	1200
El Kherada	Kafr El Sheik	2118	105.9	1200
Meseer	Kafr El Sheik	2055	102.8	1200
Rowena	Kafr El Sheik	2184	109.2	1200
Meet El Deeba	Kafr El Sheik	1956	97.8	1200
Meshteher	Qalubeya	197	9.9	1500
Kafr El Hamam	Sharkya	82	4.9	1500
El Sarw	Dakahlya	1359	68.0	1000
Edfena	El Beheira	339	17.0	1200
Saft Khaled	El Beheira	1416	70.8	1200
Tamia	Fayoum	312	12.5	1200
El Blass	Dametiya	593	29.7	1200
Bahteem	Qalubeya	389	31.2	1500
Edko	El Beheira	516	25.8	1200
<u>Field crop/horticulture farms</u>				
Kafr Soliman	Garbiya	260	13.0	1200
El Bosaly	El Beheira	234	9.4	1100
El Gemeza	Garbiya	937	46.9	1600
Komombo	Aswan	99	5.0	1000
El Korashia	Garbya	47	3.8	1500
Sids	Beni Suef	506	25.3	1200
Shandaweel	Sohag	291	14.5	1200
Malawy	El Minia	142	7.1	1200
El Sabahia	Alexandria	36	3.1	1000
El Gabal El Asfar	Qalubeya	1090	43.6	1400
El Mataana	Qena	559	44.7	1500
Kom-Osheim	El Fayoum	216	3.2	400
Kom-Osheim (water)	El Fayoum	74	0.4	0
El Nubaria	El Beheira	245	8.6	1000
Shabsher El Hessa	Garbiya	17	1.1	1500
Total		20,062	1,005.0	

Location	Governorate	Area (feddan)	Value (LE million)
<u>Horticulture farms</u>			
Qaha	Qalubeya	48	4.1
El Fayoum	El Fayoum	5	1.0
El Haram	Giza	30	4.2
Abu Rawas	Giza	30	4.1
Kafr Ashma	Munofeya	57	4.0
Esna	Qena	2	.2
Aswan	Aswan	5	1.0
El Zagazig	Sharkya	4	.8
Gezeret El She'er	Qalubeya	147	19.9
<u>Horticulture & field crop farms</u>			
Kafr Soliman	Garbiya	62	5.3
El Bossally	El Beheira	119	7.2
El Gemeza	Garbiya	75	6.4
Kom-Ombo	Aswan	92	6.5
El Korashia	Garbya	112	9.0
Sids	Beni Suef	90	6.3
Shawandeel	Sohag	126	10.2
Malawy	El Minya	81	6.5
El Sobahia	Alexandria	60	5.1
El Gabal El Asfar	Qalubeya	783	62.7
El Mata'ana	Qena	74	5.9
El Nubaria	El Beheira	77	3.5
Shabsheer El Hessa	Garbiya	36	3.1
Kom Oshiem	El Fayoum	144	2.9
Abu Neima	El Fayoum	12	1.2
Total		2,271	181.1

D. Conclusion

Table 12 shows the combined replacement value of the seed production sector assets under two alternative assumptions regarding what is to be transferred. Alternative 1 includes all of the assets of the three organizations as described above. Alternative 2 includes all of the CASP assets, but only the four productive EAO stations and only the usufruct rights to the HSU farms.

	Alternative 1	Alternative 2
CASP	LE 139.2 million	LE 139.2 million
EAO	LE 70.2 million	LE 38.2 million
HSU Farms (land only)	LE 1,200.0 million	LE 188.0 million
Total	LE 1,409.4 million	LE 365.4 million

The Present Value of Projected Cash Flows

The approach to projecting cash flows adopted by the study team was to divide the seed production sector into two parts: CASP and EAO seed processing stations, and HSU farms.

A. CASP/EAO

Currently, EAO's seed stations work almost exclusively to process seeds for CASP. After privatization, it is assumed that the two businesses will be combined. Cash flow projections, therefore, are based on adding the revenues and expenditures of the two businesses (as presented in Tables 5 and 6), with some adjustments to account for the internalization of certain transactions.⁷ Under the baseline scenario, revenues and expenditures are projected to remain constant in upcoming years. Under other scenarios, adjustments are made.

Projected revenues depend on three factors: total demand for seeds, market share, and unit prices.⁸ For each crop, the demand for seeds depends on the area planted, the planting rate per feddan, and the percentage of farmers who purchase seeds rather than use their own seeds in any given year. The planting rate per feddan is relatively fixed for most crops, although it is expected to decline for cotton as the quality of seeds improves and farmers become aware of the higher germination rates. Recent studies of farmer practices have found that farmers are acting close to optimally in terms of how frequently they replace their own seed with new seed. As far as cropped area is concerned, it has been increasing for rice and faba bean and declining for cotton, wheat, lentils, barley and maize. The conclusion of the Makary Report is that demand for the seeds processed by CASP is likely to decline gradually over the next ten years.

Regarding market share, Table 2 shows that CASP has 100 percent of the market for cotton, 75 percent for wheat, and 65 percent for rice and faba bean. It is very unlikely that the new company will be able to expand on this base. In fact, it appears more likely that, with increased private sector competition, these market shares will decline. Finally, there is little likelihood that prices of the seeds sold by CASP will increase faster than the rate of inflation. The price of open-pollinated varieties has increased substantially in recent years and cannot go much higher given farmers' option of retaining their own seeds. CASP has two monopolies, certified cotton seed and registered seeds of varieties developed by ARC. The prices for these seeds are set annually by MALR based on cost data provided by CASP. If and when the monopoly on these two products is dropped and private seed companies are allowed to compete, the sale prices of these seeds are likely to drop. In conclusion, prospects for increasing revenues appear limited. Although the possibility of declining revenues from seed processing appears very real, the base scenario for cash flow projections assumes that they will remain at the average level of the last three years. This can be considered optimistic and scenarios based on declining revenues may prove more appropriate in subsequent stages of this analysis.

The prospects for reducing expenditures are better but depend on what restrictions are placed on the new company. As can be seen from Tables 5 and 6, the two largest expense categories are raw materials and salaries. The raw materials are being purchased at market prices under very competitive conditions, so they offer little scope for savings. Salaries are excessive in both CASP and EAO, but the new company will not be able to achieve savings in this area unless it is allowed to reduce the workforce and in some cases reduce

⁷ Payments from CASP to EAO for processing services will no longer be considered a cost for CASP nor a source of revenue for EAO – they will be internal operations.

⁸ The following discussion of revenue projections is based largely on a market analysis recently carried out by Makary Consultants and financed by GTZ: Market Study on Certified Seeds in Egypt, Cairo, December 2000.

compensation levels as well, particularly "incentives." If this is allowed, substantial savings can be achieved. If not, any savings will have to come from reductions in costs other than raw materials and salaries, which amount to only 20 percent of total costs. A 20 percent reduction in these costs amounts to only a four percent reduction in total costs.

In light of the above considerations the study team developed the following seven scenarios for projecting net cash flows. The first five scenarios are based heavily on the future looking much like the past, with some adjustments. The sixth and seventh scenarios are based on more significant adjustments to costs, based on our accountant's work to recalculate costs of sales using "raw data" provided by CASP through its "crop accounts." The spreadsheets used to project cash flows are presented in Annex 1.

Scenario 1: a straight line projection of revenues and expenditures developed by combining the 1999/2000 figures presented in the modified income statements of CASP and EAO (adjusted for internalized transactions). This scenario assumes that the privatized company will continue operating the same way as the existing two organizations operated in 1999/2000. At a 15% discount rate this scenario yields a valuation of negative LE 52 million.

Scenario 2: a straight line projection of revenues and expenditures developed by combining the averages of the last three years of figures presented in the modified income statements of CASP and EAO. This assumes that the privatized company will continue to operate in exactly the same way as the existing two organizations have operated during the past three years. At a 15% discount rate this scenario yields a valuation of negative LE 52 million.

Scenario 3: the average of the last three years with revenues and the cost of sales increased by 20 percent and general and administrative expenses remaining constant. This measures the impact on profitability of increasing capacity utilization by 20 percent with no other changes. The cost of goods sold increases by the same percentage as sales, but the fixed costs remain constant. This scenario is inconsistent with the conclusions of the market analysis discussed above, but reflects the view of some that there is currently a significant unmet demand for seeds in Egypt. At a 15% discount rate this scenario yields a valuation of negative LE 35 million.

Scenario 4: the average of the last three years with a 10 percent increase in revenues and cost of raw materials, and a 10 percent reduction in all other expenses. This assumes that a private sector company will find ways of increasing revenues through more effective marketing and will also find ways of reducing some costs, although it will have to operate within restrictions that will have been imposed by government. At a 15% discount rate this scenario yields a valuation of positive LE 37 million.

Scenario 5: the average of the last three years, with all expenditures, except the cost of raw materials, reduced by 25 percent. This assumes that the new company will be given almost complete flexibility to cut costs wherever appropriate, including closing redundant facilities and reducing labor costs. At a 15% discount rate this scenario yields a valuation of positive LE 75 million.

Scenario 6: volumes sold and revenues remain constant, based on 1999/2000 figures, but the cost of sales are reduced significantly, based on a recalculation of the cost of producing seeds done on a crop-by-crop basis by the accountants of AudioConsult, using cost data from the "crop accounts" of CASP. At a 15% discount rate this scenario yields a valuation of positive LE 41 million.

Scenario 7: revenues calculated based on declining volumes sold annually, per the “average projected sales” reported in the market study of Makary. Cost of sales are reduced significantly, based on a recalculation of the cost of producing seeds done on a crop-by-crop basis by the accountants of AudioConsult, using cost data from the “crop accounts” of CASP at a 15% discount rate this scenario yields a valuation of negative LE 48 million.

Table 13 presents the net present values of future cash flows of the seven scenarios using a discount rate of 15 percent.

Scenario	Net Present Value
1	- LE 52 million
2	- LE 57 million
3	- LE 35 million
4	+ LE 37 million
5	+ LE 75 million
6	+ LE 41 million
7	- LE 48 million

Table 13 shows that CASP and EAO, if operated in the future as they have been in the past, will lose money and have a negative net present value, even if sales volumes are increased. If sales volumes fall, as predicted by Makary and shown in scenario 7, the valuation is also negative.

Only by significantly reducing costs while maintaining sales volumes, per scenarios 4, 5, and 6, can CASP and EAO be operated profitably. Even under these latter optimistic scenarios, the DCF valuation figures do not come close to the replacement valuation of CASP and EAO assets (LE 177-209 million).

It is worth noting that, as a business, CASP alone is worth more than CASP combined with EAO. This is demonstrated in Annex 3, which calculates values based on CASP alone. Under Scenario 4, for example, CASP alone has a net present value of LE 74 million, compared to a value of LE 37 million when associated with EAO. The addition of EAO adds substantial operating and G&A costs but very little additional revenue.

B. HSU Farms

As can be seen from Table 7, the HSU farms have been experiencing losses over the past three years, but gross revenues have been increasing rapidly and costs have been growing at a much slower rate. As a result, losses have declined from LE 18.4 million in 1997/98 to LE 8.8 million in 1999/2000. Because there has been so much improvement over the last three years, using a three year average as the basis for making cash flow projections would underestimate future cash flows. However, because HSU accounts are on a cash rather than accrual basis, the figures for 1999/2000, the most recent fiscal year, need to be adjusted to assure that net revenues are accurately measured. The estimated cash flow for the base scenario is as follows:

Revenues:	LE	55.0 million
Cost of goods sold:		46.5 "
Gross profit		8.5 "
G&A expenses		19.5 "
Net cash flow		- 11.0 "

All of the alternative scenarios assume that the HSU farms will improve their performance after they have been privatized. The four scenarios considered are as follows:

Scenario 1: the base scenario described above.

Scenario 2: the base scenario with a 10 percent increase in revenues, no change in cost of goods sold, and a 10 percent reduction in G&A costs.

Scenario 3: scenario 2, with a 20 percent reduction in G&A costs instead of 10 percent.

Scenario 4: the cash flow from renting 20,000 feddan of agricultural land at an average annual rent of LE 1,000 per feddan.

Table 14 presents the net present values of projected cash flows using a discount rate of 15 percent.

Scenario	Net Present Value
1	- LE 81.9 million
2	- LE 26.8 million
3	- LE 11.9 million
4	+ LE 188.1 million

It is quite clear from the above table that the HSU farms can be managed much more profitably than they are at present. Under private management these farms should generate an income in excess of the rental value of the land.

C. Conclusion

The main conclusion to be drawn from the above is that the new company cannot be profitable and therefore cannot have a positive value without some major changes in the way the three existing organizations are operating. What changes are possible cannot be determined without a more in-depth analysis of the organizations as well as detailed discussions with government policy makers regarding what changes will be allowed. It is critical that the new company be able to take whatever steps are necessary to increase revenues and reduce costs. Any restrictions should relate to 1) the requirement that the new company continue to operate as a seed production business, and 2) whatever responsibilities it might have during a transition to free and open competition for all aspects of the seed industry.

A second conclusion is that some of the assets have little or no value for seed production but are highly valuable for other purposes. From the government's perspective, these assets add value to the company but from the perspective of the new company they are a drain on profits and therefore exaggerate the company's value unless they can be sold. A way has to be found to disassociate these assets from the new company. One alternative would be for the government to retain these assets thereby bringing the replacement cost of assets to be privatized closer to their discounted cash flow value. This would have the effect of increasing the income to the state from the privatization without valuing the business at a price investors will be unwilling to pay. Alternatively, the government could leave these assets in the privatization package and the new company would be allowed to sell them. In this case, the market value of the company would be the net present value of projected cash flows plus the market value of the assets to be disposed of.

Market Value

The business that is being privatized consists of two divisions: a seed processing division and an agricultural production division. The seed processing division purchases raw seed, processes the seed and sells the seeds to wholesalers, retailers or directly to farmers. In addition to its seed processing stations, this division has a staff that is experienced in all aspects of seed processing and marketing in Egypt, and a network of established marketing channels throughout the country. The agricultural production division manages farms, mostly in the delta. This division also has an experienced staff with particular strengths in farm management. This division has obvious strong ties to ARC and CASP and has years of experience in marketing agricultural products. In recent years, about 25 percent of its income has come from seed production; the other 75 percent comes mostly from the sale of field crops. Horticultural production accounts for only 10 percent of its gross income, and a relatively high 20 percent of its income is categorized as "miscellaneous revenues", which comes mostly from leasing agricultural lands to private farmers.

The two values that were calculated in this report were the replacement cost of assets at current market prices and the net present value of discounted future cash flows. The replacement value of the assets is as follows:

CASP seed processing stations	LE	140 million
EAO seed processing stations	LE	70 million
HSU farms	<u>LE</u>	<u>1,200 million</u>
Total	LE	1,410 million

The net present value of discounted cash flows is less easily presented, since it is highly dependent on assumptions regarding the structure and management of the new company. As presently operated, the combined business would have a negative value, since it consistently generates negative cash flows. The conclusions in this report are based on two basic assumptions. First, the privatized seed processing division will both increase revenues and reduce costs as a result of improved management and fewer demands imposed by government (per scenario #4, which is considered optimistic). Second, the privatized agricultural production division will have net cash flows at least equal to the rental value of the land, again as a result of improved management and fewer government restrictions. These assumptions yield the following values (using a 15 percent discount rate):

CASP/EAO seed processing	LE	37 million
HSU farms	<u>LE</u>	<u>188 million</u>
Total	LE	225 million

The conclusion, based on the above (optimistic) assumptions, is that the government seed production sector as an ongoing business has a market value of LE 225 million.

If the non-operating EAO stations are included in the privatization package and the new company is allowed to sell them at market value, this will add LE 30 million to the value of the business. Also, the value will be increased if some of the farms are sold outright and the new company will be able to sell some of the land at market value. What this would add to the value of the business would depend on which farms would be sold.

Legal Issues

The objective of those in MALR promoting the privatization of the government's seed production activities is to consolidate these activities into one entity and convert it into a private seed production company. Present plans are for ownership of this new company to be divided as follows: 24 percent government, 40 percent employees, and 36 percent private investors. The government share is set at 24 percent because companies with a government share of 25 percent or more are subject to annual audits by the Central Audit Agency, and the 40 percent employee share is the preliminary estimate of the compensation to be provided in exchange for losing their civil servant status.

There are two possible approaches to the creation of the new company: 1) create a Law 203 public sector company, then convert it into a private joint stock company under Law 159, or 2) establish a private joint stock company under Law 159 without first creating a public sector company under Law 203.

Establishing a Law 203 Company

This approach is the traditional one used for the privatization of public companies in Egypt. The Minister of Public Enterprises would establish by decree a public sector company affiliated to an existing public sector holding company – a so-called "affiliated" or "Law 203" company. MALR would transfer the assets of CASP, EAO, and HSU to this affiliated company. These assets would become the company's in-kind capital. A committee would be formed by a decree of the Minister of Public Enterprises to verify the valuation of this in-kind capital. Once the affiliated company was registered in the commercial register and the valuation was verified, the company's shares could be immediately sold to employees and third parties, thereby transforming the company into a private entity. Under the current plan, 40 percent of the shares would be given to employees (probably through an Employee Shareowner Association), 36 percent would be sold to private investors (either through the stock market or selected investors), and 24 percent would be retained by the government (allocated to the ARC).

Assuming a market value of LE 240 million, the value of the ARC's and employee's shares would be LE 57.6 million and LE 96 million respectively, and 36 percent of the shares would be sold to private investors for LE 86.4 million.

The main disadvantage of this approach is that the privatization process would be entirely in the hands of the Ministry of Public Enterprises and the form and pace of privatization would not necessarily reflect MALR priorities or the interests of Egypt's seed industry.

Three preliminary steps must be taken before the actual privatization process can begin.

First, all assets to be privatized must be inventoried and ownership documents located and assembled. These assets will constitute the in-kind shares of the new company. Much of this work has been completed with funding from GTZ.

Second, a Presidential Decree must be issued authorizing the following actions: (see Annex 5-8 for details)

1. transferring the seed production activities from MALR to the private sector, subject to the supervision and certification of the Minister of Agriculture and Land Reclamation;
2. transferring title of a specified percentage of these assets to employees in the form of in-kind shares;

3. transferring the remainder of the assets to one legally autonomous entity, for example, the Agricultural Research Center;
4. transferring all assets as in-kind shares to the capital of a private joint stock company, to be established for this purpose in accordance with Law 159;
5. authorizing the Minister of Agriculture and Land reclamation to complete all procedures necessary to privatize this sector and establish the private joint stock company.

Third, ownership of all of the assets to be privatized must be consolidated and transferred to a government entity that has autonomous legal status.

Establishing a Private Joint Stock Company

This entire process would be governed by the Companies Law 159 of 1981 and the Capital Markets Law 95 of 1992. The first step is the valuation of assets to be privatized in accordance with the provisions of these two laws and their executive regulations. Once ownership of the assets has been consolidated, the ARC would request the General Authority for Capital Markets to conduct a valuation of the assets to be privatized. The procedures for setting up this committee and the methodology to be used in carrying out the valuation are specified in detail in Law 95. Once the valuation has been completed, the assets would be divided between the ARC and the ESA, and private investors would be invited contribute cash in exchange for shares in the joint stock company. The main complicating factor in this approach is that in-kind shares cannot be sold to third parties unless the new entity has audited financial records for two fiscal years. The private sector share of the new company, therefore, must consist of its cash contribution.⁹

Once the in-kind shares have been distributed between the ARC and the ESA, and the cash contribution has been received from private investors, the incorporators would register the company and distribute the shares among the three parties. The next step would be to hold the First General Meeting of the corporation as provided for in Law 159 and its executive regulations. The purposes of this first meeting would be to: formally accept the valuation of the in-kind shares, approve the expenses incurred in incorporating, approve the by-laws of the company, and elect a board of directors.

There are two disadvantages to this approach. First, private investors must make a cash contribution to the new joint stock company instead of simply purchasing 36 percent of the in-kind shares. This not only increases the cost to the investors (LE 82 million versus LE 135 million), but also forces the new company to start with LE 135 million in cash although a cash infusion of this size at this time may not be necessary and may not be needed. Second, this is a new and untried privatization approach for Egypt, which means that delays and setbacks can be expected. From the start it will be necessary to involve law firms that have strong experience with Companies Law 159 and Capital Markets Law 95. All of the steps will have to be carefully identified and planned prior to starting the privatization process. It is important to note that under this approach, no cash will enter government coffers. The impetus for and main benefit of the privatization is to improve the efficiency of the government seed production sector by moving it to the private sector.

⁶ The formula for calculating the required value of the joint stock company including the private investor cash contribution is the reciprocal of the non-private investor share times the value of the in-kind shares. In this case, the value of the in-kind shares is LE 240 million and the reciprocal of the non-private investor share is 1.562 ($1/0.64 = 1.562$). Therefore the value of the joint stock company is LE 375 million (LE 240 million times 1.56). The shares of the LE 375 million company are then distributed 24 percent for ARC, 40 percent for the ESA, and 36 percent for the private investors.

Policy Concerns and Issues

Those in the Ministry of Agriculture and Land Reclamation who are spearheading efforts to privatize the government's seed production entities favor the privatization all three entities (CASP, EAO, HSU) as a single company with ownership divided between the employees, the government's Agricultural Research Center, and private investors. Such a strategy raises three important policy questions:

1. Is it advantageous to privatize these entities as one company or as three or more individual companies?
2. Will the government's continued ownership of a share of the new company create a conflict of interest during distribution of new varieties of seed developed by the government, perhaps leaving private companies out in the cold?
3. Can this strategy serve as a precedent for the privatization of other government entities that are not Law 203 companies?

Combine or Break-up CASP, EAO, and HSU?

Over the past four years, a German-Egyptian project called "Improvement and Decentralization of Governmental Seed Production and Marketing" has been working with the GOE to develop a strategy to privatize CASP. In 1997, this project recommended that CASP be divided into "regional entities" prior to their privatization. The "break up" of CASP was seen as a method to facilitate privatization (by reducing the size of assets to be purchased) and to end CASP's dominant market position, thereby opening the seed sector to greater competition.

The recommendation to "break up" CASP has been supported by USAID since at least 1995. Benchmark reforms were agreed to "sell or lease at least two of the 11 CASP seed processing plants" (APCP 7) and "continue to implement the privatization of all seed processing plants..[offering] at least 50% at reasonable prices by 30 September 1996." In April 2000 a report by RDI/APRP (#101) states that:

"When CASP is privatized, it is recommended that the agency be sold as a number of separate components rather than as a single entity. This would prevent the creation of a company so large that it would have the power to monopolize the market."

This recommendation was reiterated by the Egyptian Seed Association in a letter to the Minister of Agriculture endorsing the study's findings. Private seed companies fear that a privatized CASP will have a near-monopoly in open-pollinated seed production and continued access to indirect government support, making it hard for private companies to compete. Several Egyptian and foreign experts are concerned about the possibility of "replacing a regulated government monopoly with an unregulated private monopoly." For now, it appears that the GOE has decided to play down these concerns and pursue the "one company" strategy for privatization.

If one large company does emerge from this process, it will be important for the GOE to ensure that competition between the new company and other private companies is fair and that no "barriers to entry" are erected administratively to protect the new entity from healthy competition. Such competition, whether from local or international seed companies, benefits farmers. Therefore the GOE will need to ensure that the new company is not given

subsidies or regulatory advantages not also open to all companies. For example, the new company should not inherit CASP's current legal monopoly on the production of "registered" seeds – such production must be open to all qualified companies. Similarly, the new company should not have privileged access to new varieties of crops developed by the Government's Agricultural Research Center.

Conflict of Interest during Distribution of New Varieties?

The introduction of new, improved varieties is one of the best ways a seed company can expand its sales and market share. In Egypt, over 90% of all new varieties of field crops are developed by the Agricultural Research Center, which then licenses them to seed production companies (either private or CASP) in exchange for royalty payments. The ARC's research and development efforts are considered public services.

Private seed companies are concerned that if the ARC becomes an owner of one seed company, it will tend to license its best new varieties to that particular company, rather than making them available to all companies. The ARC will have a "conflict of interest" that may inhibit it from dealing evenly with all companies. Private companies denied access to the latest ARC varieties will be unable to compete with any company given privileged access.

In 1999, the ARC developed "variety release guidelines" which outlined procedures to be followed by the ARC when offering its new varieties to seed production companies. These guidelines require neutral review of applications for licenses, based on the experience and technical abilities of the applicants, with safeguards to assure that a number of different companies are eventually selected for licenses.

The GOE will need to ensure that these guidelines are implemented strictly to promote competition among a number of seed companies. Neutral implementation, however, may be undermined by ARC ownership of one of the competing companies – namely the newly privatized entity. It may be preferable, therefore, for ARC to avoid taking a direct ownership position in any one company. If the GOE wishes to hold 24% of the shares of the new company, those shares might be held directly by the Ministry of Agriculture rather than by the ARC.

A Model for the Privatization of other Government Entities?

The traditional route for privatization of government companies in Egypt has been to convert them into Law 203 companies, which can then be privatized according to that law, under the supervision of a holding company within the Ministry of Public Enterprises.

For a variety of reasons, the Ministry of Agriculture wanted to explore alternative routes for privatizing its seed entities. In response, RDI's privatization team lawyer – Counselor Ahmed Hassan – devised an alternative strategy, which is outlined in the Legal Issues section of this report and in detail in Annex 5-8. This strategy – which involves essentially converting these entities into in-kind contributions for the founding of new joint-venture companies – may be useful in other cases where Ministries want to privatize other business-like public entities without first converting them into Law 203 companies. The strategy is promising but also complicated and untested. At this point it is too early to tell if it will work for these seed entities, let alone for additional government entities.

Annex 1: CASP/EAO DISCOUNTED CASH FLOW CALCULATIONS Seven Scenarios

1. All figures are in LE millions.
2. All tables assume 5 percent annual inflation for all revenues and expenditures.
3. All calculations exclude depreciation and interest expenses. An annual allowance for capital expenditures has been added to cover the costs of maintaining the productivity of the capital assets.
4. It is assumed that all financial obligations (debts) associated with these organizations will be assumed by the state.
5. Tables are based on combining data from CASP and EAO income statements. Note that EAO revenues and costs from "seed processing for CASP" are excluded, as this processing will become an internal affair when the organizations are combined.

Scenario 1: Revenues and expenses equal to 1999/2000

CASP/EAO Scenario 1 (LE millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
186.9	155.2	19.9	16.3	2.5	-7.0
196.2	163.0	20.9	17.1	2.6	-7.4
206.1	171.1	21.9	18.0	2.8	-7.7
216.4	179.7	23.0	18.9	2.9	-8.1
227.2	188.6	24.2	19.8	3.0	-8.5
238.5	198.1	25.4	20.8	3.2	-8.9
250.5	208.0	26.7	21.8	3.4	-9.4
263.0	218.4	28.0	22.9	3.5	-9.8
276.1	229.3	29.4	24.1	3.7	-10.3
289.9	240.8	30.9	25.3	3.9	-10.9
304.4	252.8	32.4	26.6	4.1	-11.4
319.7	265.4	34.0	27.9	4.3	-12.0
335.6	278.7	35.7	29.3	4.5	-12.6
352.4	292.7	37.5	30.7	4.7	-13.2
370.0	307.3	39.4	32.3	4.9	-13.9

Net present value:	
12%	-62.0
15%	-52.1

Scenario 2: Revenues and expenses equal to the average of the last three years.

CASP/EAO Scenario 2 (LE Millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
168.6	145.1	18.6	12.6	2.5	-7.7
177.0	152.4	19.5	13.2	2.6	-8.0
185.8	160.0	20.5	13.9	2.8	-8.5
195.1	168.0	21.5	14.5	2.9	-8.9
204.9	176.4	22.6	15.3	3.0	-9.3
215.1	185.2	23.7	16.0	3.2	-9.8
225.9	194.4	24.9	16.8	3.4	-10.3
237.2	204.2	26.1	17.7	3.5	-10.8
249.0	214.4	27.4	18.6	3.7	-11.3
261.5	225.1	28.8	19.5	3.9	-11.9
274.6	236.4	30.2	20.5	4.1	-12.5
288.3	248.2	31.8	21.5	4.3	-13.1
302.7	260.6	33.3	22.6	4.5	-13.8
317.9	273.6	35.0	23.7	4.7	-14.5
333.8	287.3	36.8	24.9	4.9	-15.2

Net present value:	
12%	-67.9
15%	-57.1

Scenario 3: Average of the last three years, with revenues and cost of sales increased by 20 percent and G & A expenses kept constant.

CASP/EAO Scenario 3 (LE Millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
202.3	173.3	18.6	12.6	2.5	-4.7
212.4	182.0	19.5	13.2	2.6	-4.9
223.0	191.1	20.5	13.9	2.8	-5.2
234.2	200.6	21.5	14.5	2.9	-5.4
245.9	210.7	22.6	15.3	3.0	-5.7
258.2	221.2	23.7	16.0	3.2	-6.0
271.1	232.3	24.9	16.8	3.4	-6.3
284.6	243.9	26.1	17.7	3.5	-6.6
298.9	256.1	27.4	18.6	3.7	-6.9
313.8	268.9	28.8	19.5	3.9	-7.2
329.5	282.3	30.2	20.5	4.1	-7.6
346.0	296.4	31.8	21.5	4.3	-8.0
363.3	311.3	33.3	22.6	4.5	-8.4
381.4	326.8	35.0	23.7	4.7	-8.8
400.5	343.2	36.8	24.9	4.9	-9.3

Net present value:	
12%	-41.4
15%	-34.8



Scenario 4: The average of the last three years with a 10% increase in revenues and cost of raw materials and a 10% reduction in all other expenses.

CASP/EAO Scenario 4 (LE Millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
185.4	149.9	16.7	11.3	2.5	5.0
194.7	157.4	17.5	11.9	2.6	5.3
204.4	165.3	18.4	12.5	2.8	5.5
214.7	173.5	19.3	13.1	2.9	5.8
225.4	182.2	20.3	13.7	3.0	6.1
236.7	191.3	21.3	14.4	3.2	6.4
248.5	200.9	22.4	15.2	3.4	6.7
260.9	210.9	23.5	15.9	3.5	7.1
274.0	221.5	24.7	16.7	3.7	7.4
287.7	232.5	25.9	17.5	3.9	7.8
302.0	244.1	27.2	18.4	4.1	8.2
317.1	256.4	28.6	19.3	4.3	8.6
333.0	269.2	30.0	20.3	4.5	9.0
349.6	282.6	31.5	21.3	4.7	9.5
367.1	296.8	33.1	22.4	4.9	9.9

Net present value:	
12%	44.4
15%	37.3

Scenario 5 : Average of the last three years with all expenses except cost of raw materials reduced by 25%.

CASP/EAO Scenario 5 (LE Millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
168.6	133.2	13.9	9.4	2.5	9.5
177.0	139.8	14.6	9.9	2.6	10.0
185.8	146.8	15.4	10.4	2.8	10.5
195.1	154.2	16.1	10.9	2.9	11.0
204.9	161.9	16.9	11.5	3.0	11.6
215.1	170.0	17.8	12.0	3.2	12.2
225.9	178.5	18.7	12.6	3.4	12.8
237.2	187.4	19.6	13.3	3.5	13.4
249.0	196.8	20.6	13.9	3.7	14.1
261.5	206.6	21.6	14.6	3.9	14.8
274.6	216.9	22.7	15.4	4.1	15.5
288.3	227.8	23.8	16.1	4.3	16.3
302.7	239.2	25.0	16.9	4.5	17.1
317.9	251.1	26.3	17.8	4.7	18.0
333.8	263.7	27.6	18.7	4.9	18.9
350.4	276.9	28.9	19.6	5.2	19.8

Net present value:	
12%	88.7
15%	74.5

Scenario 6: Revenues equal to 1999/2000 but cost of sales recalculated based on costing data presented in CASP "crop accounts"

CASP/EAO Scenario 6 (LE millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
186.9	142.7	19.9	16.3	2.5	5.5
196.2	149.8	20.9	17.1	2.6	5.8
206.1	157.3	21.9	18.0	2.8	6.1
216.4	165.2	23.0	18.9	2.9	6.4
227.2	173.4	24.2	19.8	3.0	6.7
238.5	182.1	25.4	20.8	3.2	7.1
250.5	191.2	26.7	21.8	3.4	7.4
263.0	200.8	28.0	22.9	3.5	7.8
276.1	210.8	29.4	24.1	3.7	8.2
289.9	221.3	30.9	25.3	3.9	8.6
304.4	232.4	32.4	26.6	4.1	9.0
319.7	244.0	34.0	27.9	4.3	9.5
335.6	256.2	35.7	29.3	4.5	9.9
352.4	269.0	37.5	30.7	4.7	10.4
370.0	282.5	39.4	32.3	4.9	10.9

Net present value:	
12%	49.0
15%	41.2

Note: Cost of sales based on crop by crop calculations by AudioConsult, using data from the "crop accounts" of CASP, including significant reductions in costs for "employee incentives" and "commodity inputs" (these line items appeared excessive and unlikely to be incurred by a privately-managed company)

Scenario 7: Revenues calculated based on sales volumes projected by Makary, with costs calculated on the projected volumes using data from the "crop accounts" of CASP

CASP/EAO Scenario 7 (LE millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
172.1	122.2	19.9	16.3	2.5	11.2
180.7	128.4	20.9	17.1	2.6	11.7
166.2	118.7	21.9	18.0	2.8	4.8
154.5	110.9	23.0	18.9	2.9	-1.2
143.1	104.6	24.2	19.8	3.0	-8.5
134.2	97.7	25.4	20.8	3.2	-12.9
134.0	97.7	26.7	21.8	3.4	-15.6
133.9	97.7	28.0	22.9	3.5	-18.2
134.0	102.6	29.4	24.1	3.7	-25.7
134.1	107.7	30.9	25.3	3.9	-33.6
140.8	113.1	32.4	26.6	4.1	-35.3
147.8	118.7	34.0	27.9	4.3	-37.1
155.2	124.7	35.7	29.3	4.5	-38.9
163.0	130.9	37.5	30.7	4.7	-40.9
171.1	137.4	39.4	32.3	4.9	-42.9

Net present value:	
12%	-68.7
15%	-48.1

Note: Sales volumes based on "average projected sales of the proposed company" in Makary, Sep 2000.
 Note: Cost of sales based on crop by crop calculations by AudioConsult, using data from the "crop accounts" of CASP, including significant reductions in costs for "employee incentives" and "commodity inputs" (these line items appeared excessive and unlikely to be incurred by a privately-managed company)

Annex 2: HSU Farms: Discounted Cash Flow Calculations

Scenario 1: Base Scenario				
Income	Cost of sales	Govt. G&A	Other G&A	Net cash flow
55.0	46.5	12.0	7.5	-11.0
57.8	48.8	12.6	7.9	-11.6
60.6	51.3	13.2	8.3	-12.1
63.7	53.8	13.9	8.7	-12.7
66.9	56.5	14.6	9.1	-13.4
70.2	59.3	15.3	9.6	-14.0
73.7	62.3	16.1	10.1	-14.7
77.4	65.4	16.9	10.6	-15.5
81.3	68.7	17.7	11.1	-16.3
85.3	72.1	18.6	11.6	-17.1
89.6	75.7	19.5	12.2	-17.9
94.1	79.5	20.5	12.8	-18.8
98.8	83.5	21.6	13.5	-19.8
103.7	87.7	22.6	14.1	-20.7
108.9	92.1	23.8	14.8	-21.8

Net present value:	
12%	-97.5
15%	-81.9

Scenario 2: the base scenario with a 10 percent increase in revenues, no change in the cost of goods sold, and a 10 percent reduction in G&A costs

Scenario 2				
Income	Cost of sales	Govt. G&A	Other G&A	Net cash flow
60.5	46.5	10.8	6.8	-3.6
63.5	48.8	11.3	7.1	-3.8
66.7	51.3	11.9	7.5	-4.0
70.0	53.8	12.5	7.9	-4.2
73.5	56.5	13.1	8.3	-4.4
77.2	59.3	13.8	8.7	-4.6
81.1	62.3	14.5	9.1	-4.8
85.1	65.4	15.2	9.6	-5.1
89.4	68.7	16.0	10.0	-5.3
93.9	72.1	16.8	10.5	-5.6
98.5	75.7	17.6	11.1	-5.9
103.5	79.5	18.5	11.6	-6.2
108.6	83.5	19.4	12.2	-6.5
114.1	87.7	20.4	12.8	-6.8
119.8	92.1	21.4	13.5	-7.1

Net present value:	
12%	-31.9
15%	-26.8

Scenario 3: scenario 2 with a 20 percent reduction in G&A costs instead of 10%.

Scenario 3					Net present value:	
Income	Cost of sales	Govt. G&A	Other G&A	Net cash flow	12%	15%
60.5	46.5	9.6	6.0	-1.6	-14.2	-11.9
63.5	48.8	10.1	6.3	-1.7		
66.7	51.3	10.6	6.6	-1.8		
70.0	53.8	11.1	6.9	-1.9		
73.5	56.5	11.7	7.3	-1.9		
77.2	59.3	12.3	7.7	-2.0		
81.1	62.3	12.9	8.0	-2.1		
85.1	65.4	13.5	8.4	-2.3		
89.4	68.7	14.2	8.9	-2.4		
93.9	72.1	14.9	9.3	-2.5		
98.5	75.7	15.6	9.8	-2.6		
103.5	79.5	16.4	10.3	-2.7		
108.6	83.5	17.2	10.8	-2.9		
114.1	87.7	18.1	11.3	-3.0		
119.8	92.1	19.0	11.9	-3.2		

Scenario 4: the cash flow from renting 20,000 feddan of agricultural land at an average annual rent of LE 1,000 per feddan

HSU Farms - Net Present Value of Usufruct Rights			
20.0			
21.0			
22.1			
23.2			
24.3			
25.5			
26.8			
28.1			
29.5			
31.0			
32.6			
34.2			
35.9			
37.7			
39.6			
41.6			
43.7			
45.8			
48.1			
50.5			
53.1			
55.7			
58.5			
61.4			
64.5			
67.7			
71.1			
74.7			
78.4			
82.3			
86.4			

Net present value:		
15%	LE	188.1 million
12%	LE	247.1 million

Annex 3: CASP (alone) DISCOUNTED CASH FLOW CALCULATIONS Five Scenarios

1. All figures are in LE millions.
2. All tables assume 5 percent annual inflation for all revenues and expenditures.
3. All calculations exclude depreciation and interest expenses. An annual allowance for capital expenditures has been added to cover the costs of maintaining the productivity of the capital assets.
4. It is assumed that all financial obligations (debts) associated with these organizations will be assumed by the state.

Scenario 1: Revenues and expenses equal to 1999/2000

CASP alone Scenario 1 (LE millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
186.4	151.4	19.9	13.4	2.5	-0.8
195.7	159.0	20.9	14.1	2.6	-0.8
205.5	166.9	21.9	14.8	2.8	-0.9
215.8	175.3	23.0	15.5	2.9	-0.9
226.6	184.0	24.2	16.3	3.0	-1.0
237.9	193.2	25.4	17.1	3.2	-1.0
249.8	202.9	26.7	18.0	3.4	-1.1
262.3	213.0	28.0	18.9	3.5	-1.1
275.4	223.7	29.4	19.8	3.7	-1.2
289.2	234.9	30.9	20.8	3.9	-1.2
303.6	246.6	32.4	21.8	4.1	-1.3
318.8	258.9	34.0	22.9	4.3	-1.4
334.7	271.9	35.7	24.1	4.5	-1.4
351.5	285.5	37.5	25.3	4.7	-1.5
369.1	299.8	39.4	26.5	4.9	-1.6

Net present value:	
12%	-7.1
15%	-6.0

Scenario 2: Revenues and expenses equal to the average of the last three years.

CASP alone Scenario 2 (LE Millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
167.9	141.4	18.6	9.4	2.5	-1.4
176.3	148.4	19.5	9.9	2.6	-1.5
185.1	155.9	20.5	10.4	2.8	-1.5
194.4	163.6	21.5	10.9	2.9	-1.6
204.1	171.8	22.6	11.4	3.0	-1.7
214.3	180.4	23.7	12.0	3.2	-1.8
225.0	189.4	24.9	12.6	3.4	-1.9
236.3	198.9	26.1	13.2	3.5	-2.0
248.1	208.9	27.4	13.9	3.7	-2.1
260.5	219.3	28.8	14.6	3.9	-2.2
273.5	230.3	30.2	15.3	4.1	-2.3
287.2	241.8	31.8	16.1	4.3	-2.4
301.6	253.9	33.3	16.9	4.5	-2.5
316.7	266.6	35.0	17.7	4.7	-2.6
332.5	279.9	36.8	18.6	4.9	-2.8

Net present value:	
12%	-12.4
15%	-10.4

Scenario 3: Average of the last three years, with revenues and cost of sales increased by 20 percent and G & A expenses kept constant.

CASP alone Scenario 3 (LE Millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
201.5	169.6	18.6	9.4	2.5	1.4
211.6	178.1	19.5	9.9	2.6	1.5
222.2	187.0	20.5	10.4	2.8	1.6
233.3	196.4	21.5	10.9	2.9	1.6
244.9	206.2	22.6	11.4	3.0	1.7
257.2	216.5	23.7	12.0	3.2	1.8
270.1	227.3	24.9	12.6	3.4	1.9
283.6	238.7	26.1	13.2	3.5	2.0
297.7	250.6	27.4	13.9	3.7	2.1
312.6	263.2	28.8	14.6	3.9	2.2
328.3	276.3	30.2	15.3	4.1	2.3
344.7	290.1	31.8	16.1	4.3	2.4
361.9	304.6	33.3	16.9	4.5	2.5
380.0	319.9	35.0	17.7	4.7	2.7
399.0	335.9	36.8	18.6	4.9	2.8

Net present value:	
12%	12.5
15%	10.5

Scenario 4: The average of the last three years with a 10% increase in revenues and cost of raw materials and a 10% reduction in all other expenses.

CASP alone Scenario 4 (LE Millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
184.7	147.1	16.7	8.5	2.5	9.9
194.0	154.5	17.5	8.9	2.6	10.4
203.7	162.2	18.4	9.3	2.8	10.9
213.8	170.3	19.3	9.8	2.9	11.5
224.5	178.8	20.3	10.3	3.0	12.1
235.8	187.8	21.3	10.8	3.2	12.7
247.6	197.2	22.4	11.3	3.4	13.3
259.9	207.0	23.5	11.9	3.5	14.0
272.9	217.4	24.7	12.5	3.7	14.7
286.6	228.2	25.9	13.1	3.9	15.4
300.9	239.7	27.2	13.8	4.1	16.2
315.9	251.6	28.6	14.5	4.3	17.0
331.7	264.2	30.0	15.2	4.5	17.8
348.3	277.4	31.5	16.0	4.7	18.7
365.7	291.3	33.1	16.8	4.9	19.7

Net present value:	
12%	88.0
15%	73.9

Scenario 5 : Average of the last three years with all expenses except cost of raw materials reduced by 25%.

CASP alone Scenario 5 (LE Millions)					
Income	Cost of Sales	Govt. G&A	Other G&A	Capital Reserve	Net Cash Flow
167.9	130.9	13.9	7.1	2.5	13.6
176.3	137.4	14.6	7.4	2.6	14.3
185.1	144.3	15.4	7.8	2.8	15.0
194.4	151.5	16.1	8.2	2.9	15.7
204.1	159.1	16.9	8.6	3.0	16.5
214.3	167.0	17.8	9.0	3.2	17.3
225.0	175.4	18.7	9.4	3.4	18.2
236.3	184.2	19.6	9.9	3.5	19.1
248.1	193.4	20.6	10.4	3.7	20.1
260.5	203.0	21.6	10.9	3.9	21.1
273.5	213.2	22.7	11.5	4.1	22.1
287.2	223.9	23.8	12.1	4.3	23.2
301.6	235.0	25.0	12.7	4.5	24.4
316.7	246.8	26.3	13.3	4.7	25.6
332.5	259.1	27.6	14.0	4.9	26.9
349.1	272.1	28.9	14.7	5.2	28.2

Net present value:	
12%	126.3
15%	106.1

Annex 4: Replacement Value Calculations
for CASP and EAO Seed Stations and HSU Farmland
February 2001

Dr. Ahmed El-Behery

Methodology

To assess replacement values, I visited all of the seed processing facilities of CASP and EAO and virtually all of the HSU-managed farms to be included in this privatization plan.

In terms of the CASP and EAO equipment, I estimated its replacement value – what it would cost to purchase second-hand equipment in a similar state of repair – based on my knowledge and experience with the used equipment market for agricultural purposes (both international and domestic). In most cases, the “market values” (values after depreciation) calculated by the Government Committee responsible for the book valuation of these assets was reasonable. In these cases, I considered the replacement values to be equivalent to these values after depreciation. Sometimes adjustments had to be made.

An inventory of HSU farm equipment could not be obtained in time to be included in this assessment.

The valuation of land was conducted in the following manner. The amount of land associated with each processing facility or HSU farm was confirmed on-site. In several cases the amount of land listed by the book value committee had to be adjusted. Next the value of the land was estimated: What would it cost to buy this land or similar land today? Zoning for construction or farming was held constant. Values were estimated through interviews of officials at the given facility or farm and neighboring facilities and farms. When possible, prices of recently sold lands in the area were taken into account. In each case, after establishing a good estimate of the per/feddan value, I adjusted it downward to take account of discounts associated with large transactions. Then, I multiplied the figure by the land area to establish an estimated replacement value for the piece of land.

Valuation Criteria:

Seed Processing Stations:

1- Seed cleaning machines.

- Machines book value.
- Ideal Operational hours/year based on machine lifetime & manufacturer recommendations.
- Actual Operational hours/year.
- Depreciation expenses.
- Current market value of a machine in similar condition based on US \$ exchange rate, and the same brand name, purchased nationally or internationally according to recent international prices.

- Machine origin.
- Maintenance efficiency.
- Government imposed regulation on seed industry.
- Management operating efficiency based on well-trained staff in each station.

2- *Buildings, Stores & Silos.*

- Book value.
- Year of constructing.
- Estimated building lifetime.
- Depreciation expense.
- Recent market value \ meter square.

3- *Land Valuation fore Seed Stations.*

- Booked value.
- Land selling price \ meter square according to Higher Supreme Committee for Land Valuation
- Community Infrastructures.
- Land location from urban areas & continuations of the present activities.
- Commercial market prices, based on recent sales of comparable land in their respective locations

Horticultural Services Unit (HSU)

1- Field Crops Farms.

- Farm size
- Commercial market land value valuation based on the recent sales of comparable land in their respective location. .
- Farm infrastructure (road, electricity, communications systems... etc)
- Average agricultural production per unit.
- Market land rent value as of December 2000.
- Farm location from urban areas.
- Soil fertility.
- Source of irrigation.
- Drainage system efficiency.
- Positive aspects of mass production especially the advantages of seed multiplication.
- Farms net revenues.

2- Horticulture Farms.

- Farm size
- Commercial market land value valuation based on the recent sales of comparable land in their respective location.
- Farm infrastructure (road, electricity, communications systems... etc)
- Farm location from urban areas.
- Trees ages (Seedling price, seedling age, cost of treatments.... etc).
- Kinds of trees.
- Selling prices of similar government farms according to *Higher Supreme Committee for Land Valuation.*
- Market potentials & opportunities.
- Farms net revenues.

**Summary Tables of Asset Valuation of CASP, EAO, and HSU Farms
December 2000**

Summary Table: Replacement Value of CASP Seed Processing Stations (LE millions)					
	Original Cost	Present Book Value (Committee)	Replacement Value (APRP)	Of which: Land	Replace. Value Excl. land
Sakha, cotton delinting	21.6	19.1	20.9	7.7	13.2
Sakha	15.2	9.0	26.2	16.8	9.4
El Gemaiza	0.4	-	7.2	6.9	0.3
South Tahrir	7.9	4.9	8.5	2.1	6.4
Nobaraya	8.8	5.7	11.0	2.3	8.7
Salheya	7.8	4.8	6.3	0.3	6.0
Kafr Sakr	4.8	2.8	7.2	3.4	3.8
Shirbin	5.0	2.9	6.2	2.9	3.3
Quesna	6.9	5.2	8.7	3.8	4.9
Kafour El Nil	4.8	2.3	6.7	2.2	4.5
Sids	7.6	4.7	16.3	10.1	6.2
Shousha	4.5	4.0	4.4	0.1	4.3
Beni Ghaleb	6.5	5.3	6.4	0.0	6.4
El Kharga	3.9	2.5	3.1	0.1	3.0
Total	105.7	73.2	139.2	58.7	80.4

Summary Table : Replacement Value of EAO Seed Processing Stations (LE millions)					
	Original Cost	Present Book Value (Committee)	Replacement Value (APRP)	Of which: Land	Replace. Value Excl. land
Tanta	12.3	6.8	16.1	4.2	11.9
Mansoura	0.6	0.2	10.1	9.7	0.4
Damanhoar	1.5	0.5	6.2	5.0	1.2
Bahteem	2.7	0.8	8.7	6.4	2.3
Bahteem	1.1	0.3	7.2	6.4	0.8
Shoubra (closed)	0.3	0.1	3.9	3.7	0.2
Wadi El Nil (closed)	0.1	0.1	5.3	5.2	0.1
El Minya (closed)	0.3	0.1	8.8	8.6	0.2
Daruit	0.1	-	3.9	3.7	0.2
Total	19.0	8.9	70.2	52.9	17.3

Summary Table - HSU Field Crop Farm Lands

Location	Governorate	Area (fd)	Value (LE million)	Rent value (LE/fd)
<u>Field crop farms</u>				
Sakha	Kafr El Sheik	1338	66.9	1200
Mahalet Moussa	Kafr El Sheik	458	22.9	1200
El Kherada	Kafr El Sheik	2118	105.9	1200
Meseer	Kafr El Sheik	2055	102.8	1200
Rowena	Kafr El Sheik	2184	109.2	1200
Meet El Deeba	Kafr El Sheik	1956	97.8	1200
Meshteher	Qalubeya	197	9.9	1500
Kafr El Hamam	Sharkya	82	4.9	1500
El Sarw	Dakahlya	1359	68.0	1000
Edfena	El Beheira	339	17.0	1200
Saft Khaled	El Beheira	1416	70.8	1200
Tamia	Fayoum	312	12.5	1200
El Blass	Dametiya	593	29.7	1200
Bahteem	Qalubeya	389	31.2	1500
Edko	El Beheira	516	25.8	1200
<u>Field crop/horticulture farms</u>				
Kafr Soliman	Garbiya	260	13.0	1200
El Bosaly	El Beheira	234	9.4	1100
El Gemeza	Garbiya	937	46.9	1600
Komombo	Aswan	99	5.0	1000
El Korashia	Garbya	47	3.8	1500
Sids	Beni Suef	506	25.3	1200
Shandaweel	Sohag	291	14.5	1200
Malawy	El Minia	142	7.1	1200
El Sabahia	Alexandria	36	3.1	1000
El Gabal El Asfar	Qalubeya	1090	43.6	1400
El Mataana	Qena	559	44.7	1500
Kom-Osheim	El Fayoum	216	3.2	400
Kom-Osheim (water)	El Fayoum	74	0.4	0
El Nubaria	El Beheira	245	8.6	1000
Shabsher El Hessa	Garbiya	17	1.1	1500
Total		20,062	1,005.0	

Summary Table: HSU Horticulture Farm Lands			
Location	Governorate	Area (feddan)	Value (LE million)
<u>Horticulture farms</u>			
Qaha	Qalubeya	48	4.1
El Fayoum	El Fayoum	5	1.0
El Haram	Giza	30	4.2
Abu Rawas	Giza	30	4.1
Kafr Ashma	Munofeya	57	4.0
Esna	Qena	2	.2
Aswan	Aswan	5	1.0
El Zagazig	Sharkya	4	.8
Gezeret El She'er	Qalubeya	147	19.9
<u>Horticulture & field crop farms</u>			
Kafr Soliman	Garbiya	62	5.3
El Bossally	El Beheira	119	7.2
El Gemeza	Garbiya	75	6.4
Kom-Ombo	Aswan	92	6.5
El Korashia	Garbya	112	9.0
Sids	Beni Suef	90	6.3
Shawandeel	Sohag	126	10.2
Malawy	El Minya	81	6.5
El Sobahia	Alexandria	60	5.1
El Gabal El Asfar	Qalubeya	783	62.7
El Mata'ana	Qena	74	5.9
El Nubaria	El Beheira	77	3.5
Shabsheer El Hessa	Garbiya	36	3.1
Kom Oshiem	El Fayoum	144	2.9
Abu Neima	El Fayoum	12	1.2
Total		2,271	181.1

Conclusion

The table below shows the combined replacement value of the seed production sector assets under two alternative assumptions regarding what is to be transferred. Alternative 1 includes all of the assets of the three organizations as described above. Alternative 2 includes all of the CASP assets, but only the four productive EAO stations and only the usufruct rights to the HSU farms.

Table: Summary of Replacement Values		
	Alternative 1	Alternative 2
CASP	LE 139.2 million	LE 139.2 million
EAO	LE 70.2 million	LE 38.2 million
HSU Farms (land only)	LE 1,200.0 million	LE 188.0 million
Total	LE 1,409.4 million	LE 365.4 million

More detailed tables developed by the APRP engineer during site visits are attached.

Central Administration for Seed Production

Sakha Deleneating Unit - Seed Processing Station

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Construction Land (19140 m2)	7,656,000	7,656,000	7,656,000	7,656,000	400
	Production Buildings	1,792,293	1,702,678	1,702,678	1,702,678	
	Services & Utilities Buildings (3880301 L.E.)					
	Workshop Building	341,388	298,715	324,319	324,319	
	Raw Materials Store	1,050,000	892,500	997,500	997,500	
	Final Product Store	2,005,578	1,704,741	1,905,299	1,905,299	
	Trucks Scale Building	60,000	57,000	57,000	57,000	
	Electricity Operations	423,335	402,168	402,168	402,168	
	Administration Buildings (1106375 L.E.)					
	Administration Building	666,554	633,226	633,226	633,226	
	Security Room	48,945	46,498	46,498	46,498	
	Gate Enterance Office	199,334	189,367	189,367	189,367	
	Sewage Network	135,212	128,451	128,451	128,451	
	Distinguish Network	56,230	42,173	53,419	53,419	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Production Machines	6,137,550	4,603,163	5,830,673	5,830,673	
	Services & Utilities Machines (520000 L.E.)					
	Electricity Generators	350,000	218,750	332,500	332,500	
	Scale 100 tons	120,000	90,000	114,000	114,000	
	Tractor	50,000	37,500	47,500	47,500	
	Means of Transportations (175800 L.E.)					
	Cars	135,000	92,813	114,750	114,750	
	Forklift	30,000	18,750	28,500	28,500	
	Motorcycle	10,800	7,425	8,865	8,865	
	Supplie & Tools	271,397	203,548	257,827	257,827	
	Furniture & Office Utilities	64,555	50,312	55,727	55,727	
	Total	21,604,171	19,075,778	20,886,267	20,886,267	

Central Administration for Seed Production

Kafr El Sheik /Sakha Seed Processing Station

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Constreuction Land (42000 m2)	3,596,153	3,596,153	3,596,153	16,800,000	400
	Processing Activity Building	954,327	821,688	729,387	729,387	
	Services & Utilities Buildings (4676719 L.E.)					
	Workshop Building	15,000	-	7,800	7,800	
	Stotage Unit	2,344,160	1,353,167	1,630,932	1,630,932	
	Silos	2,299,059	1,678,313	1,839,247	1,839,247	
	Scale Building	18,500	13,935	11,620	11,620	
	Administration Buildings (34000 L.E.)					
	Administration Storage Room	19,000	-	10,200	10,200	
	Motor Pool Sheds	5,000	3,050	3,500	3,500	
	Mosque Building	4,000	3,480	2,800	2,800	
	Security Room	4,000	3,400	2,400	2,400	
	Car Wash	2,000	1,660	1,100	1,100	
	Production Machines (3686640 L.E.)					
	German Seed Cleaning Machine	15,000	-	12,000	12,000	
	Riiben Seed Clearner	574,000	-	459,200	459,200	
	Clover Seed Cleaner	522,600	-	444,210	444,210	
	Riiben Seed Cleaner	296,790	44,519	252,715	300,000	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Celex Seed Cleaning	2,123,250	743,137	1,804,763	2,000,000	
	Sortex Seed Cleaner	35,000	-	26,250	26,250	
	Boby Seed Cleaner	120,000	-	15,000	15,000	
	Production Service Machines	1,227,643	354,751	1,015,443	1,015,443	
	Means of Transportations (409590 L.E.)					
	Fork Lift	60,000	16,500	43,500	43,500	
	Cars Hydraulic Sack	37,350	20,543	31,745	31,745	
	Trailer	8,200	-	6,806	6,806	
	Convyor Belt	39,600	15,000	32,440	32,440	
	Cars	264,440	136,766	235,190	235,190	
	Motorcycles	18,400	9,900	14,400	14,400	
	Services & Tools	563,528	139,716	473,414	473,414	
	Furniture & Office Utilities	43,095	15,628	28,772	28,772	
	Total	15,210,095	8,971,306	12,730,987	26,177,356	

Central Administration for Seed Production

El Gemaza / Gharbia Seed Processing Station

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Construction Land Area (3441,5 m2)	0	0	0	6,883,000	200
	Processing Activity Buildings	90,000	5,400	45,000	45,000	
	Production Activity Buildings (55000 L.E.)					
	Seed Sheds	20,000	0	11,000	11,000	
	Seed Storage	17,000	0	9,350	9,350	
	Anexx Storage	18,000	0	9,000	9,000	
	Adminstration Buildings (55000 L.E.)					
	Garage and Sags Storage	20,000	0	11,000	11,000	
	Spare Parts Store	20,000	0	10,000	10,000	
	Main Gate	15,000	5,400	8,250	8,250	
	Processing Activity Machines	57,000	0	37,050	50,000	
	Production Services Machines (90000 L.E.)					
	Tractors	24,000	0	15,100	15,100	
	Electricity Generator	43,000	0	37,950	37,950	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Electrical Motors	20,000	0	15,000	15,000	
	Air Compressor	3,000	0	2,400	2,400	
	Means of Transportations					
	Trailers	16,000	3,900	12,200	12,200	
	Bonvyor Belt	20,000	13,000	18,000	18,000	
	Cars (Pick Up)	38,000	0	24,700	24,700	
	Motorcycles	1,000	0	600	600	
	Supplies & Tools	2,220	1,179	1,777	1,777	
	Furniture	3,430	1,338	2,445	2,445	
	Total	427,650	30,217	270,822	7,166,772	

Central Administration for Seed Production

South Tahrir Seed Processing Station						
#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/ L.E.
	Construction Land (21000 m2)	129,780	129,780	129,780	2,100,000	100
	Processing Activity Building	606,717	515,709	455,038	455,038	
	Services & Utilites Buildings (4334045 L.E.)					
	Workshop Building	127,844	111,863	102,275	102,275	
	Storage Unit	667,584	447,281	567,446	567,446	
	Silos	2,456,876	2,088,345	2,088,345	2,088,345	
	Generator Rooms	14,671	7,337	12,470	12,470	
	Trucks Scale Room	36,741	24,065	29,393	29,393	
	Roads	477,544	214,895	405,912	405,912	
	Seeds Shed	254,950	114,727	203,960	203,960	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	ARRP Value L.E.	Land Value per m2/ L.E.
	Electricity Operation	297,835	260,606	253,160	253,160	
	Administration Buildings (669193 L.E.)					
	Administration Building	243,206	231,046	206,725	206,725	
	Administration Storage Room	89,888	85,394	71,910	71,910	
	Fences	129,294	115,072	103,435	103,435	
	Security Rooms	14,479	13,755	11,583	11,583	
	Sewage Network	27,053	25,700	21,642	21,642	
	Rest Rooms	19,401	18,431	14,551	14,551	
	Motor Pool Sheds	26,867	20,150	21,494	21,494	
	Distinguish Network	119,005	89,254	101,154	101,154	
	Machines & Tools					
	Seed Processing Plant	1,553,922	38,848	1,165,442	1,165,442	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/ L.E.
	Tractors	42,825	20,671	32,119	32,119	
	Electricity Generator	85,000	46,750	72,250	72,250	
	Trucks Scale	80,000	28,000	60,000	60,000	
	Sags Sewing Machines	2,700	1,485	2,025	2,025	
	Means Of Transportation (attached List)	158,970	100,573	130,881	130,881	
	Supplies & Utilities (attached List)	14,137	9,263	10,780	10,780	
	Furniture & Office Utilities	4,454	3,100	3,650	3,650	
	Total	7,936,693	4,876,827	6,481,380	8,451,600	

Central Administration for Seed Production

EL Nobaria Seed Processing Station

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	LAND					
	Construction land Area (23100 m2)	410,584	410,584	410,584	2,310,000	100
	BUILDINGS:					
	Processing Activity Buildings					
	Operating Unit Seed & Clovers Seeds	825,134	717,867	618,851	618,851	
	Servicies & Utilities Production Buildings (4066581 L.E.)					
	Silos	2,465,566	2,095,731	2,095,721	2,095,721	
	Workshop Buildings	114,573	100,251	97,387	97,387	
	Electrical Operations	37,145	32,511	31,573	31,573	
	Seed Sheds	294,330	132,448	235,464	235,464	
	Generator Room	17,007	16,157	14,456	14,456	
	Storage Building	490,718	328,781	392,574	392,574	
	Roads	647,242	291,259	517,794	517,794	
	Administrative Buildings (5945293 L.E.)					
	Administrative Building	249,644	237,162	212,197	212,197	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Administrative Storage	88,352	83,934	75,099	75,099	
	Security Room	14,765	14,027	12,550	12,550	
	Motor Pool Sheds	30,894	23,170	26,260	26,260	
	Fenses	111,890	99,582	89,512	89,512	
	Distinguish Network	20,790	15,592	17,672	17,672	
	Sewage Network	19,468	18,495	16,548	16,548	
	Rest Rooms	21,749	20,662	18,487	18,487	
	Trucks Scale Building	36,741	12,859	27,556	27,556	
	Machines & Tools Production Machines					
	Seed Processing & Clover Machines	2,625,360	918,876	1,969,020	1,969,020	
	Services & Utilities Tools	244,230	100,924	196,153	2,000,000	
	Means of Transportations (55800 L.E.)					
	Means of Transportations					
	Means of Transportations					
	Trailers	25,800	17,530	20,650	20,650	
	Cars (Pickup)	30,000	0	19,500	19,500	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Tractors	0	0	0	130,000	
	Supplies & Tools	4,805	3,542	3,719	3,719	
	Furniture & Office					
	Utilities	2,994	1,701	2,171	2,171	
	Total	8,829,781	5,693,645	7,121,498	10,954,761	

Central Administration for Seed Production

El Salheya Seed Processing Station

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2 / L.E.
	Constration Land (40866m2)	490,392	490,392	490,392	286,062	7
	Production Activity Building Opperating Unit	573,301	484,480	429,976	429,976	
	Servicies & Utilities Buildings (3968994 L.E.)					
	Storage Store	153,851	103,080	123,081	123,081	
	Workshop Building	147,879	129,394	125,697	125,697	
	Silos	2,454,307	2,086,161	2,174,752	2,174,752	
	Scale Room	36,741	31,230	29,393	29,393	
	Electricity Opperations Generator Rooms	303,753	265,784	258,190	258,190	
		17,683	16,799	15,031	15,031	
	Roads	628,221	282,699	502,577	502,577	
	Seed Sheds	226,559	151,795	181,247	181,247	
	Administration Buildings (826235 L.E.)					

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2 / L.E.
	Administration Buildings	254,981	24,232	216,734	216,734	
	Administration Storage rooms	111,693	94,939	94,939	94,939	
	Fences	194,143	172,787	155,314	155,314	
	Rest Rooms	21,218	20,157	18,035	18,035	
	Security Room	32,299	30,684	27,454	27,454	
	Motor Pool Shed	25,709	21,823	21,823	21,823	
	Sewage Network	36,673	34,839	31,172	31,172	
	Firing Network	149,519	112,139	127,091	127,091	
	Machines & Utilities (Seed Processing)	1,553,922	38,843	1,165,442	1,165,442	
	Machines & Utilities (242400 L.E.)					
	Tractors	38,600	21,840	24,590	24,590	
	Generator	85,000	37,188	80,750	80,750	
	Scale 80 tons	80,000	20,000	64,000	64,000	
	Sags Machines	10,800	5,940	9,180	9,180	
	Air Compressor	10,500	5,775	8,925	8,925	
	Scale 5 tons	17,500	4,375	14,875	14,875	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2 / L.E.
	Means of Transportations	165,570	88,337	144,885	144,885	
	Motorcycle	2,750	1,513	2,200	2,200	
	Supplies & Tools	7,670	4,681	6,520	6,520	
	Furniture & Office Utilities	4,374	3,283	3,720	3,720	
	Total	7,835,608	4,785,189	6,547,985	6,343,655	

Central Administration for Seed Production						
Kafr Sakr Seed Processing Station						
#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2
	Construction Lands Area (16800 m2)	504,000	504,000	504,000	3,360,000	200
	Processing Activity Buildings	85,000	38,250	63,750	63,750	
	Services Production Buildings (1754886 L.E.)					
	Electricity Operations	395,346	286,626	276,742	276,742	
	Generator Room	18,335	16,318	12,835	12,835	
	Storage Building	504,021	337,694	378,016	378,016	
	Storage Sheds	315,940	211,680	236,955	236,955	
	Workshop Buildings	100,981	73,211	75,736	75,736	
	Roads	403,336	181,501	302,503	302,503	
	Adminstration Buildings (475891 L.E.)					
	Adminstation Building	386,611	344,084	289,958	289,958	
	Fenses	56,895	50,637	42,671	42,671	
	Security Room	13,920	12,389	10,440	10,440	
	Rest Rooms	16,465	14,654	11,526	11,526	
	The Main Gate Office	2,000	1,780	1,400	1,400	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2
	Production Machines	1,255,771	439,520	941,828	1,500,000	
	Supplies & Tools	439,700	83,435	370,945	370,945	
	Means of Transportations					
	Cars	15,000	0	9,750	9,750	
	Convyor Belt	83,000	29,050	53,950	53,950	
	Trailers	7,000	2,450	4,550	4,550	
	Fork Lift	25,100	8,785	16,315	16,315	
	Motorcycles	6,600	4,950	5,610	5,610	
	Tools & Supplies	140,962	97,069	122,555	122,555	
	Furinture & Office Utilities	29,736	19,446	24,697	24,697	
	Total	4,805,719	2,757,529	3,756,732	7,170,904	

Central Administration for Seed Production

Sherbien Seed Processing Station

#	Assets	Book Value L.E.	Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Construction Land Area (14700 m2)	1,400,000	1,400,000	1,400,000	2,940,000	200
	Processing Activity Buildigns	73,000	57,670	58,400	58,400	
	Services & Production Utilities Buildings					
	Workshop Building	85,000	44,625	72,250	72,250	
	Sheds	174,000	74,820	147,900	147,900	
	Seeds Storage Building	570,000	245,100	484,500	484,500	
	Genrator Room	20,000	16,600	17,000	17,000	
	Roads	62,000	3,100	49,600	49,600	

#	Assets	Book Value L.E.	Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Electrical Operations	130,000	68,250	104,000	104,000	"
	Scale Room	57,275	55,557	55,557	55,557	
	Administration Buildings (536000 L.E.)					
	Administration Building	305,000	247,050	259,250	259,250	
	Storage Room	20,616	8,865	17,524	17,524	
	Security Room	16,464	13,336	13,994	13,994	
	Rest Room	13,920	11,275	11,832	11,832	
	Fenses	180,000	145,800	153,000	153,000	
	Production Machines	1,170,000	292,500	936,000	1,200,000	
	Servicies & Production Tools	406,882	134,800	318,300	318,300	

#	Assets	Book Value L.E.	Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Measn of Transportation					
	Conveyor Belt	83,000	35,150	64,650	64,650	
	Trailers	21,000	6,500	15,200	15,200	
	ForkLift	45,000	0	27,000	27,000	
	Cars	84,000	36,750	63,000	63,000	
	Motorcycle	2,079	104	1,559	1,559	
	Servicies & Tools	47,633	23,884	41,689	41,689	
	Furniture & Offices Utilitites	59,755	27,453	52,871	52,871	
	Total	5,026,624	2,949,189	4,365,076	6,169,076	

Central Administration for Seed Production

Quesna Seed processing Station

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m ² /L.E.
	Construction Land(12600 m2)	1,260,000	1,260,000	1,260,000	3,780,000	300
	Processing Activity Building	884,496	574,922	751,822	751,822	
	Services & Utilities Buildings (2361668 L.E.)					
	Trucks Scale Building	57,275	53,266	48,684	48,684	
	Silos	2,304,393	1,820,470	1,958,734	1,958,734	
	Production Services Machines (113600 L.E.)					
	Production Machines	2,123,250	1,380,113	1,804,763	2,000,000	
	Tractor	33,600	21,840	21,840	21,840	
	Trucks Scale 80 tons	80,000	52,000	68,000	68,000	
	Means of Transportation (106900 L.E.)					
	(Motorcycle)	6,750	3,238	4,538	4,538	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	(Trailers)	22,000	14,300	16,500	16,500	
	Nissan Pick up	78,150	53,728	66,428	66,428	
	Supplies & Tools	9,207	7,826	7,826	7,826	
	Furniture & Office Utilities	4,155	3,028	3,242	3,242	
	Total	6,863,276	5,244,731	6,012,377	8,727,614	

Central Administration for Seed Production

Kafour El Nile - Fayoum Seed Processing Station

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value Per m2/L.E.
	Land:					
	Construction Land (33600m2)	0	0	0	10,080,000	300
	Processing Activity Building Unit	573,301	487,306	429,976	429,976	
	Services & Utilities Buildings (3663977 L.E.)					
	Silos	2,073,868	1,762,788	1,866,481	1,866,481	
	Piscal Scale Room	36,741	31,230	27,556	27,556	
	Electricity Opperations	331,779	290,307	282,012	282,012	
	Generator Room	27,363	25,995	23,259	23,259	
	Workshop	121,802	106,577	103,532	103,532	
	Storage Unit	619,427	415,016	464,570	464,570	
	Sheds	130,935	87,726	104,748	104,748	
	Roads	322,062	144,928	257,650	257,650	
	Administration Buildings (1177831 L.E.)					
	Fenses	190,968	169,962	152,774	152,774	
	Adminstration Building	736,026	699,225	625,622	625,622	
	Adminstration Storage	91,236	77,551	77,551	77,551	
	Rest Room	38,359	36,441	32,605	32,605	
	Security Rooms	17,419	16,548	14,806	14,806	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value Per m2/L.E.
	Motor Pool Sheds	24,877	21,145	21,145	21,145	
	Sewage Network	10,150	9,643	8,628	8,628	
	Firing System	68,796	51,597	58,477	58,477	
	Production Machines	1,553,922	38,843	1,165,442	1,165,442	
	Utilities & Supplies Machines	249,600	113,815	192,950	192,950	
	Means of Transportations (303000 L.E.)					
	Trailers	44,000	17,600	30,800	30,800	
	Conveyor Belt	60,500	21,125	51,425	51,425	
	Cars (pick up)	197,500	86,418	154,375	154,375	
	(Motorcycles)	1,000	0	450	450	
	Supplies & Utilities	22,293	13,736	18,949	18,949	
	Furniture & Office Utilities	8,000	4,685	5,269	5,269	
	Total	7,551,924	4,730,207	6,171,052	16,251,052	

Central Administration for Seed Production

Sids / Bani Suiof Seed Processing Station

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Construction Land Area (11010 m2)	0	0	0	2,202,000	200
	Processing Activity Buildings	298,300	229,691	238,640	238,640	
	Service Production Building (2143573 L.E.)					
	Silos	2,023,963	1,720,368	1,821,567	1,821,567	
	Seeds Sheds	67,510	20,928	47,257	47,257	
	Workshop Building	47,100	24,728	37,680	37,680	
	Scale Room	5,000	4,050	4,000	4,000	
	Administration Building (48180 L.E.)					
	Administration Building	31,400	25,434	23,550	23,550	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Security Room	6,280	5,088	4,710	4,710	
	Spare Parts Room	3,500	2,835	2,800	2,800	
	Engenicers Room	3,500	2,835	2,800	2,800	
	Rest room	3,500	2,835	2,800	2,800	
	Production Machines	1,898,300	0	1,328,810	2,000,000	
	Seeds Cleaner	35,000	1,750	26,750	26,750	
	Production Services Machines Means of Transportations (186500 L.E.)	201,550	165,032	160,013	160,013	
	Cars	72,500	31,719	61,625	61,625	
	ForkLift	18,000	0	13,500	13,500	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Trailers	18,000	0	13,500	13,500	
	Conveyor Belt	72,500	18,125	58,000	58,000	
	Motocycle	5,500	0	4,400	4,400	
	Supplies & Tools	17,283	9,207	13,035	13,035	
	Furniture & Office Utilities	6,842	1,868	5,257	5,257	
	Total	4,835,528	2,266,493	3,870,694	6,743,884	

Central Administration for Seed Production

Shousha / EL Minia Seed Processing Station

#	Assets	Book Value L.E.	Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Land Construction Area (25200m2)	47,056	47,056	47,056	75,600	3
	Processing Activity Buildings	90,000	90,000	90,000	90,000	
	Production Services Buildings (1080808 L.E.)					
	Storage Building	501,000	501,000	501,000	501,000	
	Generator Room	20,000	20,000	20,000	20,000	
	Trucks Scale Room	80,000	80,000	80,000	80,000	
	Electric Transformer Room	18,000	18,000	18,000	18,000	
	Workshop Room	120,908	120,908	120,908	120,908	

#	Assets	Book Value L.E.	Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Sheds	340,900	340,900	340,900	340,900	
	Adminisrtation Buildings (649062 L.E.)					
	Storages Building	34,000	34,000	34,000	34,000	
	Adminstration Building	391,610	391,610	391,610	391,610	
	Fenses	180,000	180,000	180,000	180,000	
	Security Room	14,964	14,964	14,964	14,964	
	Rest Room	16,465	16,465	16,456	16,456	
	Sewage Neetwork	12,023	12,023	12,023	12,023	
	Production Machines	2,000,000	1,800,000	1,800,000	2,000,000	
	Production Services Machines	170,450	101,512	141,793	141,793	

#	Assets	Book Value L.E.	Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Means of Transportations (369550 L.E.)					
	Trailers	21,800	12,260	16,350	16,350	
	Forklift 3 tons	24,000	0	18,000	18,000	
	Canveyor Belt	243,000	200,325	210,700	210,700	
	Pickup Cars	72,500	13,594	50,750	50,750	
	Transportations: Motorcycle	8,250	6,188	7,013	7,013	
	Supplies & Hand Tools	42,105	34,422	35,794	35,794	
	Furniture & Office Utilities	8,762	7,447	7,451	7,451	
	Total	4,457,793	4,042,674	4,154,768	4,383,312	

Central Administration for Seed Production

Bani Ghalib - Asuit Seed Processing Station

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Land:					
	Construction Land (54600 m2)	273,000	273,000	273,000	0	0
	Actual Land Area (38967 m2)	0	0	0	779,340	20
	Production Buildings	866,800	806,124	736,780	736,780	
	Services Building & Production Unit (2627738 L.E)					
	Seed Silos	2,303,393	1,819,680	1,957,884	1,957,884	
	Electricity Operations	122,128	114,336	103,809	103,809	
	Water Wills	144,942	109,431	123,201	123,201	
	Scale Room	57,275	53,266	48,684	48,684	
	Production Machines	2,528,856	1,896,642	2,402,413	2,402,413	
	Production Services Buildings (139700 L.E.)					
	Tractors	32,600	24,450	27,710	27,710	
	Scale (80 tons)	80,000	60,000	68,000	68,000	
	Air Comperssor	5,000	3,750	4,250	4,250	
	Scale	5,000	3,988	4,250	4,250	
	Frensh Scale	9,000	7,178	7,650	7,650	
	Sewing Machine	8,100	6,460	6,885	6,885	

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	Means of Transportations (84870 L.E.)					
	Trailers	33,870	24,313	31,632	31,632	
	Convey Belt	40,000	30,000	40,000	40,000	
	Motorcycle	11,000	8,250	11,000	11,000	
	Supplies & Utilities	11,075	8,257	11,075	11,075	
	Furniture & Office Utilities	5,161	3,868	4,388	4,388	
	Total	6,537,200	5,252,993	5,862,611	6,368,951	

Central Administration for Seed Production

El Wadi El Gedid Seed Processing Centers

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/ L.E.
	Construction Land (10000 m2)				100,000	100
	Processing Activity Building Unit	328,583	279,296	246,437		
	Servicies & Utilities Buildings (1420098 L.E.)					
	Seed Storage Unit	315,098	211,116	252,048		
	Seed Sheds	188,447	126,259	150,758		
	Roads	268,392	120,776	214,714		
	Workshop	184,064	156,454	138,048		
	Electrical Operations & Generator set	410,763	359,418	308,072		
	Piscal Scale Room	36,741	34,904	29,393		
	Generator Room	16,593	15,763	12,445		
	Administration Buildings (585127 L.E.)					
	Adminstration Buildings	262,748	249,611	197,061		
	Fences	77,847	69,274	62,278		
	Adminstration Storage	124,815	106,093	93,611		
	Rest Rooms	23,139	21,982	15,040		

#	Assets	Book Value L.E.	Net Value After Depreciation Deduction L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/ L.E.
	Security Rooms	16,663	15,830	12,497		
	Motor Pool Sheds	24,499	20,824	18,374		
	Sewage	30,834	29,292	23,126		
	Firing System	24,582	18,437	18,437		
	Production Machines	1,312,664	590,699	984,498		
	Production Services Machines	220,300	107,330	171,900		
	Means of Transportations					
	Tracks	11,000	6,050	8,250		
	Utilities & Services	13,000	5,901	11,051		
	Furniture & Office Utilities	3,870	1,389	1,973		
	Total	3,894,642	2,546,698	2,970,011		

Egyptian Agricultural Organization

Tanta Seed Processing Station

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	LAND:						
	Construction Land						
	Area (6694 m2)	5,151	0	5,151	5,151	2,082,000	300
	Other Area (7175 m2)	0	0	0	0	2,152,500	300
	BUILDINGS (2525479 L.E.)						
	Activity Production Buildings	1,149,344	419,397	729,947	1,028,939	1,500,000	
	Services & Utilities Buildings	1,349,577	199,764	1,149,813	1,182,203	1,182,203	
	Roads	26,558	26,558	0	21,246	21,246	
	Machines (9522276 L.E.)						
	Production Machines	9,457,809	4,608,016	4,849,793	7,566,247	9,000,000	
	Services & Tools	64,467	48,782	15,685	39,890	39,890	
	Means of Transportation	2,000	881	1,119	1,600	1,600	
	Supplies & Tools	187,513	184,414	3,099	65,863	65,863	
	Furniture & Office Utilities (26914 L.E)						
	Furniture	7,438	5,806	1,632	4,720	4,720	
	Installations	3,222	1,763	1,459	2,203	2,203	
	Office Supplies	16,254	11,238	5,016	11,386	11,386	
	Total	12,269,333	5,506,619	6,762,714	9,929,448	16,063,611	

Egyptian Agricultural Organization

El Mansoura Seed Processing Station

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	LAND:						
	Construction Land						
	Area (9658,72 m2)	19,317	0	19,317	19,317	9,659,720	1,000
	BUILDINGS (226349 L.E.)						
	Production Buildings	6,932	6,932	0	3,466	30,000	
	Services & Utilities Buildings	219,417	78,430	140,987	150,503	200,000	
	ROADS	93,742	93,742	0	70,307	100,000	
	MACHINES (57046 L.E.)						
	Production Machines	30,850	30,850	0	12,340	30,000	
	Services & Utilities Machines	26,196	17,731	8,465	14,702	14,702	
	Means of Transportations						
	Supplies & Tools	147,304	146,099	1,205	45,382	45,382	
	Furniture & Utilities (24003 L.E.)						
	Furniture	2,571	1,654	917	1,547	1,547	
	Installation	20,986	20,691	295	16,382	16,382	
	Office Supplies	446	302	144	304	304	
	Total	567,761	396,431	171,330	334,250	10,098,037	

Egyptian Agricultural Organization

Damanhour Seed Processing Station

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2 / L.E.
	LAND :						
	Construction land						
	Area (25200 m2)	6,440	0	6,440	6,440	5,040,000	200
	Buildings (1040237L.E.)						
	Production Buildings	427,736	409,281	18,455	299,415	299,415	
	Services & Utilities Buildings	612,501	143,219	469,282	445,378	445,378	
	Roads	0	0	0	0	30,000	
	Machines (265560 L.E.)						
	Production Machines	171,966	171,966	0	120,376	300,000	
	Services & Utilities Machines	93,594	81,526	12,068	57,503	57,503	
	Means of Transportations						
	Supplies & Tools	10,000	1,594	8,406	7,000	not available	
	Furniture & Office Utilities (2518 L.E.)						
	Furniture	1,773	996	777	888	888	
	Installations	133	71	62	40	40	
	Office Supplies	612	28	84	266	266	
	Total	1,464,820	935,866	528,454	997,671	6,233,855	

Egyptian Agricultural organization

Bahtem Crops Seed Processing Station

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2 /L.E.
	Land:						
	Constraction Land						
	Area (32083 m2)	0	0	0	0	6,424,600	200
	Buildings (1412489 L.E.)						
	Activity Buildings	785,906	659,233	126,673	628,725	628,725	
	Services & Utilities Buildings	626,583	174,861	451,722	492,060	492,060	
	Roads	0	0	0	0	25,000	
	Machines (1250906 L.E.)						
	Production Machines	1,122,212	911,957	210,255	673,327	1,000,000	
	Services & Utilities Machines	128,694	81,042	47,652	87,694	87,694	
	Means of Transportations						
	Supplies & Tools	33,128	31,471	1,657	15,697	15,697	
	Furniture & Office Utilities (14495 L.E.)						
	Furniture	1,981	1,144	837	1,347	1,347	
	Installations	9,680	9,384	296	5,794	5,794	
	Office Supplies	2,834	2,061	773	1,762	1,762	
	Total	2,711,018	1,871,153	839,865	1,906,406	8,682,679	

Egyptian Agricultural Organization

Bahtem Vegetables Seed Processing Station

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/L.E.
	LAND:						
	Land Construction						
	Area 32083 m2	0	0	0	0	6,416,600	200
	BUILDINGS (253620 L.E)						
	Processing Activity Buildings	23,395	13,686	9,709	18,716	18,716	
	Services & Utilities Buildings	164,291	32,076	132,215	131,283	131,283	
	Roads	65,934	15,165	50,769	49,451	49,451	
	Machines (792893 L.E)						
	Production Machines	764,914	631,054	133,860	535,440	535,440	
	Services & Utilities Machines	27,979	22,064	5,915	14,839	14,839	
	Means of Transportations						
	Supplies & Utilities	13,586	11,119	2,467	7,668	7,668	
	Furniture & Office Utilities(11230 L.E)						
	Furniture	3,031	2,787	244	1,816	1,816	
	Installation	5,458	5,447	11	2,827	2,827	
	Office Supplies	2,841	1,873	968	1,898	1,898	
	Total	1,071,429	735,271	336,158	763,938	7,180,538	

Egyptian Agricultural Organization

Shoubra El Khema Seed Processing Station

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value Per m2/L.E.
	LAND: Construction Land						
	Area:3741,37 m2	20,000	0	20,000	20,000	3,741,000	1,000
	BUILDINGS (77954)						
	Processing Activity Buildings	18,485	18,485	0	12,940	12,940	
	Services & Utilities Buildings	59,418	22,155	37,263	39,625	39,625	
	Administration Buildings	0	0	0	0	0	
	Machines (27290 L.E.)						
	Production Machines	11,358	11,358	0	5,679	15,000	

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value Per m2/L.E.
	*Servises & Utilities Machines	15,932	12,857	3,075	9,282	9,282	
	Macans of Transportations						
	Supplies & Utilities	191,014	186,637	4,377	87,025	87,025	
	Furniture & Office Utilities (16279 L.E.)						
	Furniture	5,265	2,905	2,360	3,662	3,662	
	Installations	940	36	404	580	580	
	Office Supplies	10,074	5,659	4,415	6,365	6,365	
	Total	332,486	260,092	71,894	185,158	3,915,479	
* Transferred to Bahtem							

Egyptian Agricultural Organization

Wadi El Nile Seed Processing Station

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value Per m2/L.E.
	LAND:						
	Construction Land						
	Area: (5185 m2)	19,732	0	19,732	19,732	5,185,000	1,000
	BUILDINGS (68494 L.E.)						
	Production Buildings	13,059	13,059	0	7,835	7,835	
	Services & Utilities Buildings	55,435	16,241	39,194	39,308	39,308	
	Roads	0	0	0	0	10,000	
	MACHINES (19894 L.E.)						
	Production Machines	19,894	19,894	0	7,859	15,000	
	Services & Utilities Machines	0	0	0	0	0	
	Means of Transportation						
	*Supplies & Utilities	20,172	18,052	2,120	10,646	10,646	
	Furniture & Office Utilities (5663 L.E.)						
	Furniture	4,032	2,931	1,101	2,360	2,360	
	Installations	492	460	32	295	295	
	Office Supplies	1,139	687	452	747	747	
	Total	133,955	71,324	62,631	88,782	5,271,191	

* Transferred to Bahteem

Egyptian Agricultural Organization

El Menia El Seed Processing Station

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2
	LAND:						
	Construction Land						
	Area (17186 m2)	8,656	0	8,656	8,656	8,593,000	500
	BUIDINGS (154504 L.E)						
	Processing Activity						
	Building	11,173	11,173	0	5,587	50,000	
	Servicies & Utilities						
	Building	143,331	39,908	103,423	103,973	103,973	
	Roads	0	0	0	0	5,000	
	Machines (421145 L.E.)						
	Production Machines	38,390	38,390	0	11,517	11,517	
	Servicies & Utilities						
	Machines	3,755	3,090	665	1,792	2,000	
	Means of Transportations						
	Supplies, Scale & Utilities	75,034	70,514	4,520	42,542	42,542	
	Furniture & Office Utilities(3291 L.E)						
	Furniture	1,405	845	560	926	926	
	Installation	43	26	17	27	27	
	Office Supplies	1,843	1,223	620	1,271	1,721	
	Total	283,630	165,169	118,461	176,291	8,810,706	

Egyptian Agricultural Organization

Dairout Seed Processing Station

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/ L.E.
	LAND						
	Construction Land						
	Area 12360 m2	3,833	0	3,833	3,833	3,708,000	300
	BUILDINGS (28218 L.E)						
	Processing Activity Buildings	10,240	10,240	0	5,120	50,000	
	Services & Utilities Buildings	6,187	2,031	4,156	3,549	50,000	
	Administration Building	11,791	4,127	7,664	5,896	7,000	
	MACHINES						
	Production Machines	31,350	31,350	0	12,540	30,000	

#	Assets	Book Value L.E.	Depreciation L.E.	Net Book Value L.E.	Market Value L.E.	APRP Value L.E.	Land Value per m2/ L.E.
	Servicies & Utilities Machines	22,080	15,261	6,819	11,714	11,714	
	Means of Transportations						
	Supplies & Utilities	7,891	6,673	1,218	4,517	4,517	
	Furniture & Office Utilities (5969 L.E)						
	Furniture	781	469	312	524	524	
	Installations	4,610	4,588	22	3,210	3,210	
	Office Supplies	578	387	191	414	414	
	Total	99,341	75,126	24,215	51,317	3,865,379	

H.S.U

Field Crops Farms

NO	Area	Governorate	Farm Land Size			Land Value Per faddan LE.	Total Land Value in LE	Rent Value Per faddan/LE	Remarks
			Fad	Ker	Sah				
1	Sakha	Kafr Elshiek	1337	23	18	50,000	66,899,479	1200	Land value includes net cultivated area, roads, irrigation canals, drainage, threshing areas & buildings land
2	Mahalet Moussa	Kafr Elshiek	457	15	8	50,000	22,881,944	1200	
3	Elkarada	Kafr Elshiek	2118	8	20	50,000	105,918,403	1200	
4	Mesaer	Kafr Elshiek	2055	4	17	50,000	102,759,809	1200	
5	Rewana	Kafr Elshiek	2184	14	20	50,000	109,230,903	1200	
6	Meet Eldibaa	Kafr Elshiek	1956	0	14	50,000	97,801,215	1200	
7	Moshtuhor	Qalubia	197	5	23	50,000	9,862,413	1500	
8	Kafr Elhamam	Sharkia	82	5	16	60,000	4,934,167	1500	
9	El Serw	Dakahlia	1359	9	19	50,000	67,970,399	1000	
10	Edfina	Bihira	339	8	6	50,000	16,967,188	1200	
11	Saft Khalied	Bihira	1416	14	15	50,000	70,830,469	1200	
12	Tamia	Faium	312	4	23	40,000	12,488,264	1200	
13	Elballasy	Dameyata	593	2	20	50,000	29,655,903	1200	
14	Bahtiem	Qalubia	389	13	0	80,000	31,163,333	1500	
15	Edko	Bihira	516	14	0	50,000	25,829,167	1200	
16	Nekhel	Sinai	23	8	16	0	0	0	
17	Kafr Soliman	Garbia	260	3	21	50,000	13,008,073	1200	
18	Elbossaly	Bihira	233	19	23	40,000	9,353,264	1100	
19	El Gemeza	Garbia	937	9	15	50,000	46,870,052	1600	
20	Kom-ombo	Aswan	99	2	7	50,000	4,954,774	1000	
21	El Korashia	Garbia	46	21	7	80,000	3,750,972	1500	
22	Sids	Bani-Suief	506	12	10	50,000	25,325,868	1200	
23	Shandaweel	Sohag	290	20	21	50,000	14,543,490	1200	
24	Malawy	El Menia	142	8	9	50,000	7,117,448	1200	
25	El Sabahia	Alex.	36	6	0	85,000	3,081,250	1000	
26	El Gabal El Asfar	Qalubia	1090	2	3	40,000	43,603,542	1400	
27	El Mattana	Qena	559	7	7	80,000	44,744,306	1500	

NO	Area	Governorate	Farm Land Size			Land Value Per faddan LE.	Total Land Value in LE	Rent Value Per faddan/LE	Remarks
			Fad	Ker	Sah				
28	Kom-Oshiem	El Faium	216	0	0	15,000	3,240,000	400	
	Water Lake		74			5,000	370,000	0	
29	El Nubaria	Bihira	245	6	0	35,000	8,583,750	1000	
30	Shabsher El Hessa	Garbia	17	13	19	60,000	1,054,479	1500	
31									

H.S.U

Horticulture Farms

NO	Farm Name	Farm Location	Farm Land Size			Land Value Per faddan/LE	Total Land Value LE	Remarks
			Fad	Ker	Sah			
1	Kaha	Qalubia	48	8	21	85,000	4,111,432	Land value includes cultivated area, buildings land, roads, irrigation & drainage canals & threshing areas
2	El Faium	El Faium	5	0	0	200,000	1,000,000	
3	Elharam	Giza	30	19	3	135,000	4,157,578	
4	Abu Rawash	Giza	30	17	10	135,000	4,147,969	
5	Asuit	Asuit	9	0	0	0	0	
6	Kafr Ashma	Munofia	57	3	19	70,000	4,001,059	
7	Eсна	Qena	2	2	0	80,000	166,667	
8	Aswan	Aswan	5	0	0	200,000	1,000,000	
9	Elzagazig	Sharkia	4	12	0	20,000	800,000	
10	Geziert El Shiccr	Qalubia	147	10	15	135,000	19,904,766	
11	Kafr Soliman	Garbia	62	9	8	85,000	5,303,056	Land value does not include buildings land, roads, irrigation/drainage canals & threshing areas
12	El Bossally	Bihira	119	4	1	60,000	7,150,104	
13	El Gemeza	Garbia	75	18	17	85,000	6,441,259	
14	Kom-Ombo	Aswan	92	18	0	70,000	6,492,500	
15	El Korashia	Garbia	112	3	12	80,000	8,971,667	
16	Sids	Bani Suief	90	9	9	70,000	6,327,344	
17	Shandaweel	Sohag	126	22	7	80,000	10,154,306	
18	Malawy	El Menia	81	14	22	80,000	6,529,722	
19	El Sabahica	Alex.	60	0	0	85,000	5,100,000	
20	El Gabal El Asfar	Qalubia	783	20	2	80,000	62,706,944	
21	El Mattana	Qena	74	3	7	80,000	5,930,972	
22	El Nubaria	Bihira	77	0	0	45,000	3,465,000	
23	Shabshier El Hessa	Garbia	36	22	19	85,000	3,140,720	
24	Kom Oshiem	El Faiuem	144	0	0	20,000	2,880,000	
	Abu Neima	El Faiuem	12	0	0	100,000	1,200,000	

**Legal Procedures Establishing an Egyptian Joint-Stock Company For
Seed Production Including Current In-Kind Assets and Provisions
Related Thereto**

By Councilor Ahmed Hassan

Introduction:

Studies have formerly been conducted on the privatization of the seed processing stations affiliated to the Central Administration for Seed Production, CASP, together with a statement on the legal procedures required to establish an Egyptian joint-stock company and a statement on the legal terms and conditions related thereto.

In light of the discussions held with Dr. Youssef Abdel Rahman and officials in CASP and the Horticultural Services' Unit, HSU, it has been decided that a joint-stock company be established from the outset including the following assets:

The Assets (i.e. lands, processing stations, warehouses and machines affiliated to:

1. The Horticultural Services' Unit, HSU, affiliated to the National Research Center:
 - A unit of a special nature affiliated to the Research Center of a juridical person. In terms of general authorities, HSU is subject to all laws applicable to scientific organizations. HSU has special regulations lifting a number of governmental restrictions off HSU's back.
2. The Central Administration For Seed Production, CASP, in the Ministry of Agriculture and Land Reclamation:
 - A governmental body subject to all governmental rules and regulations.
3. The Egyptian Agricultural Organization, EAO:
 - A general authority of a juridical person.

Percentages of Shares Required:

- 24%, percentage of governmental bodies
- 40%, percentage of employees
- 36%, percentage of private-sector shareholders

Asset Inventory and Ownership Document Verification

Whether a private joint-stock company is established or a public company, all assets included in the in-kind quota must be taken stock of in details as well as preparing ownership documents related thereto. This is due to the fact that such assets will constitute the in-kind capital that must be clarified in the articles of incorporation and the statute of the company in depth. There must be stated that the in-kind capital shall be transferred to the new company of which shares shall be issued for shareholders equal to the in-kind shares.

Furthermore, there must be a preliminary report on asset valuation prepared by specialized committees to be submitted to the asset valuation verification committee concerned with establishing the company together with articles of incorporation and the statute of the company.

Unification of Ownership

Due to the multi-affiliation of the aforementioned assets and the importance of unifying the governmental body owning the capital of the company, the transfer of assets that will constitute the government share under the name of the Agriculture Research Center (HSU), as it is the establisher of the company, is inevitable. Moreover, the share of such governmental body must be specified, a matter that would necessitate the issuance of a presidential decree to transfer the abovementioned assets. However, it would be appropriate to include all the former procedures in one presidential decree.

Determination of Employee Ownership

Due to the fact that employees working in these organizations are set to have a share of 40% approximately of the asset value representing the in-kind share, a decision must be taken specifying that owners of the in-kind share under valuation are the employees and the Agricultural Research Center in order to compute the employee percentage out of the private sector share, prior to the

incorporation of the company. This is due to the fact that if the in-kind share is computed on incorporation as part of the government share, it will exceed 51% of the capital, thus making the company a public sector one and not a private sector company.

Terms and Conditions of Establishing a Private-Sector Company:

In accordance with provisions of the Law no.97 of 1983 promulgating Public-sector companies and organizations and the executive regulation related thereto, a company is deemed a public sector one if the share percentage of public sector companies, organizations, and banks reaches 51% of the company capital (Article 18).

Moreover, In accordance with, Law no.203 of 1991 promulgating public enterprise companies and the executive regulation related thereto, a company is affiliated to the Public Enterprise Sector if the holding companies and other affiliated companies own more than 50% of the company capital (Article 16).

In order to establish a private sector joint stock company, the government and public sector organizations and companies share must fall below 50%. Thus, this condition must be taken into consideration, in other words, if the government contribution is through the in-kind share, such share must be less than 50% so that the residual cash share of the capital would be at least 51%.

The Importance of the Feasibility Study in Determining the Capital:

Due to the fact that one of the purposes of establishing the private sector joint-stock company is to achieve profit, shareholders must be attracted to buy the company shares by conducting a study on achieving profits against the saving base, bearing in mind that such information must be made available before offering the shares to other shareholders.

Since the current status of in-kind share, whether owned by the government or the employees will be included in the company capital, a cash share will be required from private sector shareholders.

Undoubtedly, the study conducted by economists and financial experts will clarify how cost effective will both the in-kind and cash shares be, whatever their value may be together.

In order to reduce the percentage of the in-kind share in the capital as much as possible, titles to be transferred must be specified together with parts where the usufruct right will be applied, after obtaining the approval of the authorities concerned so that the capital would not totally be in the form of in-kind shares.

Consequently, in-kind assets to be transferred to the company must be specified as well as assets that will apply the usufruct right.

The Possibility of establishing a Joint-Stock Company under the New Investment Incentives Law no. 8 of 1997:

This law gives many privileges, most important of which are the immediate incorporation of the company and the tax exemption from company profits for 5 years for companies established under such law.

In order to establish a company under the provisions of the aforementioned law, the company must carry out one of the activities set forth in Article 1 in the law and the executive regulation related thereto, which is as follows:

- Reclamation and cultivation arid and desert lands
- Livestock, poultry and fish production
- Industry including industrial activities that would change raw materials and their shape through mixing, processing and shaping them

Accordingly, if the object of establishing the company is restricted to producing, processing and improving the varieties of seeds and fertilizers only, without any commercial or importing activity, the company can be established under the provisions of this law and it can make use of the privileges allowing for tax exemption and immediate incorporation of the company.

An attempt will be done with the General Authority for Investment to approve the aforementioned. This might also necessitate a letter directed from the Deputy Prime Minister to the Minister of Economy to facilitate the incorporation procedures in the framework of this law.

The Role of the Central Audit Agency in Auditing the Company Accounts after Incorporation:

In accordance with Article 3 of Law 144 of 1988 promulgating the Central Audit Agency, CAA, the agency scope of specialization includes companies that are not considered public sector companies but where public sector companies or banks hold a share of no less than 25% of its capital.

In other words if the government share, whether direct share or through public companies and organizations, reaches 25% of the company capital, the CAA must audit the company accounts. However, this matter does not prevent the presence of another auditor besides the CAA.

If the government share is less than 25% of the company capital, the CAA shall have nothing to do with auditing the company accounts.

It is agreed upon that the government share should not exceed 24% of the company capital so that the employees would have a share in the asset ownership, upon which they would be granted assets against in-kind shares.

How can the Employees own Shares?

Employees can own shares either through establishing an employee Shareholder Union in the new company including all company employees in accordance with Law no. 95 of 1991 promulgating capital market and the executive regulation related thereto. Such union shall be an independent juridical person provided that the union statute organizes methods through which employees can benefit from their respective shares.

Or through distributing shares on employees in accordance with the rules specified formerly. However, in both cases, a presidential decree must be issued stipulating the employee rights.

Undoubtedly, the number of shareholder employees shall be quite large.

Can a public sector company be established of a capital only confined to in-kind shares, and then such shares would be sold later?

- Public sector companies are still governed by Law no. 97 of 1983 and its executive regulation.
- A decree establishing the company shall be issued by the minister concerned, where the articles of incorporation and the statute of the company shall be attached thereto.
- The law states that one of the company incorporators should either be a public authority or a public juridical person.
- In-kind shares shall be valued through a committee formed by a decree from the minister concerned and the membership of representatives from the Ministry of Finance and the Central Audit Agency.
- In-kind shares provided by the public authority may be in the form of a concession or a usufruct right to part of the public money or other affiliated rights. Valuation of such in-kind shares must be approved by the General Meeting.
- It is noted that after the incorporation of the company as a public sector one, shares owned by the government or the public sector company must be sold (Article 27).
- The only way of selling such shares shall be through transferring the company to Law no. 203 of 1991 promulgating public sector companies as companies affiliated to holding companies. However, the former necessitates the issuance of a decree by the Prime Minister (with authorization from the president. In such a case, the company will be subject to the supervision and monitoring of the Ministry of Public Enterprises).

Can we establish a public sector company from the outset, and then sell its shares to employees and third parties?

- Law no.203 of 1991 governs public enterprise sector companies and executive regulations thereof.
- The affiliated joint-stock company may be established provided that the holding company, public banks and insurance companies

own no less than 51%. The decree establishing the company shall state its affiliation to the holding company.

- The capital of such company can be in-kind shares and third parties can also have shares.
- Minister of Public Enterprises shall issue a decree establishing the affiliated company. The articles of incorporation and the statute of the company shall be attached to the decree.
- A committee formed by a decree from the Minister of Public Enterprises shall carry out the verification of the in-kind share valuation. Such committee shall be chaired by a councilor and shall consist of a technical, legal, accounting and economic expert as well as representatives from the holding company, Ministry of Finance and the Central Audit Agency. The Minister must approve such valuation.
- The company shares shall be liable to sale once it has been established (registered in the commercial register) even if such shares are in return of in-kind shares or shares of incorporators, a matter contrary to the clause stated in the law of joint-stock companies preventing the sale of shares given in return of in-kind shares or shares of incorporators, except after the publication of a two fiscal year balance sheet.
- In other words, the company can sell its shares immediately after incorporation to employees or third parties.
- However, the former necessitates that one of the holding companies shall be responsible for the company incorporation procedures. Hence, such company shall be affiliated to holding companies after its incorporation and thus, subject to the supervision of the Minister of Public Enterprises and the Minister of Agriculture.

Intricacy of Alternatives Proposed to establish a Public Sector Company:

It is evident from the aforementioned that there are some difficulties or obstacles, not related to legal issues, that may impede the incorporation of a public or a public enterprise sector company, in spite of the simplicity of the incorporation procedures and resorting to the share selling option because the company then will not be

under the supervision of the Ministry of Agriculture but rather the Ministry of Public Enterprises.

The matter that runs in favor of establishing a joint-stock company from the very beginning as formerly referred to. A statement of valuation procedures of in-kind shares when establishing such company is included in the following:

Methods and Procedures Valuating the In-kind Shares of the Private Sector Company:

Law no. 159 of 1981 promulgating holding companies and executive regulations thereof and laws no. 95 of 1992 promulgating capital markets have stated methods, procedures, ways of grievance, and ratification of in-kind shares as follows:

Preliminary Valuation of In-kind Shares and the Specialized Committee:

If material or immaterial in-kind shares are included in the capital of Joint-Stock company or a Limited by Shares Company, incorporators or board of directors must request from the Administration Body concerned to verify if such shares have been valuated soundly.

A committee formed by The General Authority for Capital Market shall conduct such valuation under the chairmanship of a councilor of a judicial body and the membership of experts in fields of economy, accounting, law, and technicalities to be chosen by this body. If the in-kind share is owned by the government or one of the general authorities or public sector companies then representatives from the Ministry of Finance and the National Investment Bank shall also be included in this committee. The committee shall submit its report in a period that does not exceed 60 days starting from the date it has received the documents.

If the one of the abovementioned bodies owns the in-kind share, incorporators or board of directors shall, two weeks prior to the meeting set to discuss the report, distribute the committee report on partners and the Central Audit Agency, CAA.

The value of such shares shall not be finalized until approved by the majority of subscriber group or partners possessing two thirds of the shares or cash contributions, after discarding shares owned by the abovementioned shareholders. Share presenters shall not have the

right to vote in relation to approval of share values, even if they are shareholders or owners of cash shares.

If it becomes evident that the value of the in-kind share is less than one fifth of the value set forth, the company then should reduce the capital to match such decrease.

However, share presenter may pay the difference in cash or he may withdraw. In-kind shares shall only be shares of a fully paid value.

Incorporators shall conduct a preliminary valuation of such in-kind shares and they may resort to experienced accountants, technicians and others, after providing them with all necessary documents related thereto.

Incorporators shall, after signing the preliminary preliminary articles of incorporation and prior to the subscription deadline of cash shares, submit a request to the General Authority for Capital Markets demanding the verification of the valuation of the in-kind shares. Such request shall include all data and facts related to the in-kind shares to be valued as well as the name of partner(s), who submitted this request. A copy of the preliminary preliminary articles of incorporation, statute of the company, preliminary report conducted to value in-kind shares upon request of incorporators, and necessary documents shall be attached thereto.

Incorporators shall pay the sum of money specified by the Authority as part of the fees of experts assigned to undertake this task.

The First General Meeting:

The first General Meeting of the company shall be held, upon an invitation from the incorporators or by proxy, within a month of the subscription closing or after the deadline of submitting the report of in-kind share valuation, whichever is nearer.

All partners have the right to attend this meeting, whatever the number of their shares or contributions may be.

The chairmanship of the General Meeting shall be given to the incorporator with the greatest sum of shares or contributions. The General Meeting shall elect a secretary general and vote counters.

The Chairman, secretary general and vote counters shall sign the session minutes.

For the validity of the General Meeting session, at least partners owning half of the issued capital must attend the meeting.

If the quorum set forth in the former article is not established, another meeting should be held within 15 days of the prior one.

The second General Meeting shall be valid if the number of partners represents at least quarter of the issued capital. Decisions of the General Meeting shall be issued with a majority of votes representing the shares and contributions of attendants, unless the law states a special majority in certain matters. The meeting shall take the following into consideration:

- 1-Valuating in-kind shares as set forth in the report of the committee concerned.
- 2-The incorporators report on the incorporation of the company and the expenditure related thereto.
- 3-Approval upon the statute of the company, the General Meeting shall not introduce any amendments to the statute without the approval of the incorporators and the majority of the partners representing at least two thirds of the capital.
- 4-Approval of members of board of directors and the financial auditor.

Distribution of Committee Report on Subscribers, Partners, and Members of the General Meeting:

Incorporators or board of directors shall, at least two weeks prior to the General Meeting, distribute the committee report on subscribers, partners, members of the General Meeting, and the Central Audit Agency, if the in-kind share is owned by the government, one of the Public Authorities or public companies.

Distribution shall take place by sending the report copies to parties concerned by a registered mail, return receipt acknowledged, according to their addresses set forth in the stock certificates, or by leaving it in the specified legal selected domicile of the company. Moreover an advertisement must be made in the newspapers about such report as well as delivering a report copy to a subscriber or a partner.

General Meeting Approval of In-kind Shares:

If the valuation of the in-kind shares is, after the approval of the General Meeting, less than one fifth of the value formerly set, the company then shall reduce the issued capital to match such decrease, unless the holder of the in-kind share pays the difference in cash or withdraws.

The ownership of the in-kind share shall be solely to owner, undisputable, and totally assigned to the company. In such a case the share presenter shall be given in-kind shares equal to the final valuation approved by the General Meeting. The value of such shares shall be considered to be paid fully.

The Call for the General Meeting:

The call for the General Meeting should include the name, object, and capital of the company as well as the meeting's agenda, time and place.

Where a quorum for the first meeting has not been fulfilled, the second General Meeting shall be convened within the subsequent 15 days.

The announcement for the meeting shall be published in two daily newspapers, at least one written in the Arabic language, 8 days prior to the meeting set date. The invitation could also be directed to partners or subscribers by a registered mail, return receipt acknowledged, according to the addresses stated in the stock certificates or other documents.

The right to attend the General Meeting:

Each subscriber or shareholder shall, no matter how many shares he\she owns, have the right to attend in person the General Meeting. Attending by Proxy shall not be allowed, except if given to one of the subscribers or shareholders by a written proxy.

Chairmanship and Secretariat of the General Meeting:

The chairmanship of the General Meeting shall be assigned to the incorporator with the largest contribution, who accepts such position. In case of equal contributions between incorporators, chairmanship shall be given by a lot. The General Meeting shall select a secretary general and a vote counter.

The secretary general shall record the quorum, deliberations, resolutions, number of abstentions and votes cast for each resolution as well as all issues demanded to be recorded by attendants. Names of subscribers, and shareholders attending the General Meeting shall also be documented in a special register proving their attendance in person or by proxy.

The minutes and register referred to shall be signed by the Chairman, secretary and vote counter.

The Necessity of Issuing a Presidential Decree:

Due to the fact that the seed production activity is assigned to governmental bodies and, thus, the assets related thereof are owned by such bodies, a matter that necessitates transferring shares to employees, a presidential decree must be issued from the outset including the following:

1. Transferring the seed production activity from all units of the Ministry of Agriculture to the private sector, subject to the supervision and certification of the Ministry of Agriculture.
2. Transferring title of assets to employees by a percentage not exceeding 40% of asset in the form of in-kind shares in the company.
3. Transferring the title of the rest of the assets to the Agriculture Research Center (Horticultural Services Unit, HSU).
4. Transferring all assets as in-kind shares to capital of a private sector joint-stock company, to be established for this purpose after valuation in accordance with the law and partnership of both the employees and the private sector.
5. Authorizing Deputy Prime Minister\Minster of Agriculture and Land Reclamation in executing such decree and setting forth terms and conditions required to complete procedures needed to privatize this sector and establish the company.

Offering Company Shares in Public Subscription:

Offering the company shares in a public subscription requires the following procedures:

1. Signing the preliminary preliminary articles of incorporation and the company statute by the incorporators or their agent.

2. Drafting and endorsing the prospectus by the auditor as well as submitting the prospectus, the preliminary articles of incorporation and the statute of the company to the General Authority for Capital Market for endorsement (according to the model required in this concern).
3. Incorporators' payment of at least 10% of their contributions and submittal of evidencing certificate related thereof, provided that such percentage would increase to the quarter within 3 months.
4. Notifying the General Authority for Capital Markets of share issuance and payment of required fees.
5. Publishing the prospectus in two daily or famous newspapers. Public subscription shall not commence except after the lapse of 15 days of publication. Such publication shall continue for a month time.
6. Subscription shall take place through a bank authorized to receive subscriptions.
7. Each subscriber shall pay 10% of the value of shares required and issuance fees announced, provided that such percentage would increase to the quarter within 3 months.
8. If subscribed capital shares exceed the issued capital shares by the increase of demanded shares against offered ones, contributions in excess shall be distributed after the end of the subscription period.
9. Each subscriber shall be given a certificate stating the number of his shares after distribution.
10. The First General Meeting shall be called to endorse the procedures taken and select members of board of directors representing shareholders from the public subscription.

Restrictions on Shares Corresponding to In-kind and Incorporators Shares in the Private Company:

Article 45 of Law 159 of 1981 promulgating Joint-Stock companies states the following:

"Incorporation contributions and shares, given in return of in-kind shares, shall not be distributed. Furthermore, shares subscribed by company incorporators shall not be circulated before the publication of the balance

sheet, the profit and loss account and other documents related thereto for two full fiscal years, from the date of the company incorporation.”

Percentage to Be Subscribed by Company Incorporators:

Article 41 of the Executive Regulation of Capital Market Law no. 95 of 1992 states that:

“The issued capital of each Joint-Stock Company and Partnerships Limited by shares, offering its shares for public subscription, must not be less than L.E. one million, provided that what is being subscribed by incorporators must not be less than half of the issued capital.”

In other words, prior to endorsing the prospectus from the General Authority for Capital Markets, incorporators must subscribe in 50% of the capital and pay the sums required by law in relation to cash shares or endorse the valuation of the in-kind share in a manner that would cover such a percentage.

Percentage to Be Offered in Public Subscription:

Article 61 of the Executive Regulation of Law 159 of 1981 promulgating joint-stock companies states the following:

“Shares to be offered in public subscription must not be less than 35% of the total cash shares.”

Basic Data and Special Procedures to Incorporate a Joint-Stock Company in accordance with Investment Law or Company Law:

Incorporators: must not be less than 3, whether a natural or a juridical person.

Contribution percentages: percentage of the contribution of each incorporator must be specified. There are no restrictions upon such percentages.

Company Name: the name of the company must be derived from its object and must not be confused with another company's name. It is proposed that the name of the company would be “The Egyptian Company for Seed Production.

Company Object: the object of the company must be in the framework specified by the law and the executive regulation thereof i.e. producing,

developing, importing and trading in seeds as well as foreign company representation, if the company is established under Law 159 of 1981. However, if the company is established under Investment Law no. 8 of 1997, the company activity will be confined to producing and developing of seeds only, with no trading activity.

Investment Costs: should be specified approximately.

Capital:

- i. **Capital Allowed:** It is proposed to be three fold of the issued capital.
- ii. **Capital Issued:** It should include the in-kind share (cash share paid must not be less than 10%) and it shall be deposited in the bank to complete incorporation procedures.

Share Value: It is proposed to be L.E.10.

Board of Directors: should not be formed with less than 3 shareholders. Two experienced members could also be included. Names of members of board of directors must be specified, whether in their personal capacities or as representatives of juridical persons in the statute.

Auditor: should be appointed from those chartered to audit joint-stock companies.

Legal Consultant: should be specified.

Incorporators Agent: A power of attorney must be issued by incorporators for the selected agent to conduct company incorporation procedures in concerned bodies and sign on behalf of incorporators until incorporation procedures are completed and handed to board of directors.

Public Subscription: a prospectus must be drafted and endorsed by the auditor and the General Authority for Capital Markets.

The company preliminary articles of incorporation and statute must also be drafted.

Valuation of the In-Kind Share: the in-kind share constituting the capital must be specified, a preliminary report must be prepared, a valuation verification committee must be formed from the General Authority for Capital Market and fees of no more than ten thousand Egyptian pounds (L.E. 10,000) must be paid.

Submission of Applications:

- 1. Company Authority:** in the event of incorporating a joint-stock company in accordance with Law no. 159 of 1991, or in the event of incorporating a company of objects related to the Investment Law (dual activities).
- 2. General Authority for Investment:** If the object of the company is one of the fields specified in Law no. 8 of 1997 and the executive regulation thereof.

Notification of Security Issuance: The General Authority for Capital Markets must be notified with the issuance of securities in accordance with Article 2 of Law no. 95 of 1992, and accrued fees of no more than ten thousand Egyptian pounds (L.E. 10,000) must be paid.

Annex 6: Draft Presidential Decree (translation of Arabic original)

**Presidential Bill No. --- of ---
Reorganizing Seed Production Sector
in the Ministry of Agriculture and Affiliated Bodies**

The President,

Having regard to the constitution,

Having regard to the Agriculture Law no. 53 of 1966,

Having regard to the Presidential Decree no. --- of --- organizing the Ministry of Agriculture and specifying terms of reference,

Having regard to the approval of the cabinet,

HAVE ADOPTED

Article 1

Seed production sector, assets and stations shall be reorganized, whether affiliated to Ministry of Agriculture, Agriculture Research Center or Egyptian Agricultural organization as follows:

- 1- Private sector shall, wholly or partially, take responsibility of the seed production sector.
- 2- Stations affiliated to the seed production sector in all units referred to herein before shall be sold, leased, transformed to a joint-stock company, where government owns in-kind shares, or utilized by usufruct right. Such stations may also have their management transferred to private sector, to one of the specialized companies to be established for this object, or a public enterprise company shall be established for this purpose, where the Minister of Agriculture shall be the competent minister responsible for applying provisions of Law no. 203 of 1991.
- 3- Staff working in seed production units referred to herein before shall have in-kind shares in the company to be established in return of early retirement and in accordance with the rules set forth by the cabinet.
- 4- Shares shall be estimated in accordance with the relevant laws.

Article 2

Ministry of Agriculture shall continue in controlling seed production sector in relation to seed certification in accordance with the Law of Agriculture and executive regulations.

Article 3

Deputy Prime Minister\Minister of Agriculture shall carry out the measures required and take necessary legal procedures to implement such Decree in a manner that would achieve the objectives referred to herein before.

Article 4

The Decree shall be published in the Official Gazette and shall take force on the following day of its publication.

Done at -----

The President