

## LAND TITLING AND REGISTRATION PROGRAM, SECOND PHASE (LTRP2)

(PE-0107)

### EXECUTIVE SUMMARY

<b>Borrower and guarantor:</b>	Republic of Peru	
<b>Executing agency:</b>	Ministry of Agriculture, through the Program Coordinating Unit. Subexecuting agencies will be the Special Rural Cadastre and Land Titling Project (PETT) and the National Superintendency of Registry Offices (SUNARP). The National Natural Resources Administration (INRENA) and National Culture Institute (INC) will be involved in technical areas of the program.	
<b>Amount and source:</b>	IDB (OC):	US\$23.3 million
	Local counterpart:	<u>US\$23.4 million</u>
	Total:	US\$46.7 million
<b>Terms and conditions:</b>	Amortization period:	20 years
	Grace period:	4 years
	Disbursement period:	4 years
	Interest rate:	variable
	Inspection and supervision:	1%
	Credit fee:	0.75%
	Currency:	U.S. dollar (Single Currency Facility)
<b>Objectives:</b>	The project's general objective is to continue developing an efficient, transparent land market that will encourage efficient land use. Specific objectives to this end are: (i) to afford legal certainty as to rights to individual land parcels and campesino and native community territories; (ii) to consolidate the process of modernizing the rural cadastre and land registry so titling work can proceed efficiently, the cadastre can be expanded and updated, and the register can be kept current; and (iii) to foster measures to safeguard protected natural areas and culturally significant sites that abut the titling zones.	

**Description:** The project has three components:

1. **Cadastral, titling, and registration of parcels of rural land and campesino and native community lands.** Funding will be provided to finalize technical, legal, and administrative steps to formalize boundaries and legal title, produce cadastral maps, and record and deliver 525,330 titles in the Coast and Sierra regions (on which work began in the first phase of the program) to beneficiaries. The program also will finance boundary and title regularization steps for approximately 250,000 additional properties in the Sierra. Given the losses inherent in this process, the end result will be about 178,131 new titles handed over to beneficiaries. Outside the campesino and native communities there are roughly 3 million individual parcels of land. By the end of the second phase of the land titling and registration program (LTRP2) proposed here, including what was done in phase one, the status of close to 1.7 million properties will have been regularized. This component also will formally demarcate and deliver legal communal title for 541 campesino community lands in selected areas of the Sierra and, as a pilot project, demarcate and title nine native communities in the Selva. Among the criteria used to select communities were their location in depressed areas, the extent of their overlap with mining claims, less interest among community members in securing individual titles, and the ancestral origin of the land. The consultants who examined environmental and social issues as the project was being prepared met frequently with residents of various communities to hear their views on the titling of their land. Before work is done with campesino and native communities during the project proposed here, a detailed diagnostic assessment of issues will be conducted with active input from these communities into cadastral, titling, and registration tasks. When the campesino and native community titling process is complete it will be evaluated by an independent agency (firm or NGO) engaged for that purpose.
2. **Strengthening of institutions and of the rural cadastre and registry system.** The project's titling and cadastre component will be executed by the Special Rural Cadastre and Land Titling Project (PETT). Parcels will be recorded by the Special Rural Property Section of the Regional Registry Offices coordinated by the National Superintendency of Registry Offices (SUNARP). As part of the component, the agencies will be given better equipment for their operations and technical work and staff will receive training from the executing agencies. Funds are budgeted for implementation of a rural cadastre maintenance strategy. As a

key piece of this records-maintenance effort, a Rural Cadastre Information System will be installed at PETT headquarters with 14 nodes in the regional offices, linked to the registry offices. For SUNARP, along with equipment upgrades and training, funds will be provided to develop and start up an Electronic Registry System connected to the rural cadastre.

3. **Environmental and cultural analysis, protection, and monitoring.** The object of this component is to afford legal safeguards to keep protected natural areas and culturally significant sites in the project's area of influence intact. Two actions to be financed are the definitive demarcation of 15 nature reserves (of a total of 52 such protected areas) and an analysis of ecological preserves and archeological sanctuaries and historic monuments. Funds also are budgeted for a program to monitor the project's impacts over time. To implement this component, the PETT will enter into technical agreements with the National Natural Resources Administration (INRENA) and the National Culture Institute (INC).

**The Bank's  
country and  
sector strategy:**

The Bank is pursuing three fundamental objectives in its support for Peru: (i) help advance the country's efforts to modernize the economy, with support particularly for structural reforms, production infrastructure expansion, private investment financing, and development of a policy framework to spur efficient natural-resources management and investments in agriculture; (ii) provide continuing assistance in the country's poverty-reduction effort, and (iii) support modernization of the State, especially at the provincial and local level. By strengthening property rights, the proposed project will help boost private investment in rural areas, assist in the modernization of government operations and, by virtue of its rural focus, help reduce poverty.

**Environmental  
and social  
review:**

Two important considerations as far as the process's environmental and social impacts are concerned are the potential for: (i) shifts in natural-resources use; (ii) more intensive use of potential chemical inputs; and (iii) the regulations of Law 26,505 could adversely affect the vertical complementarity system in the way communities in the Sierra cultivate the land. Consequently, the project will need special guidelines for work with campesino and native communities when the land slated for titling abuts nature reserves or culturally significant sites. Gender considerations also need to be taken into account in the titling process.

Regarding the potential for stepped-up use of farm chemicals, many of the initiatives comprising the ongoing Animal Health and Plant Protection Program (1025/OC-PE) provide for controls and advisory support regarding pesticide and fertilizer use, as well as an integrated pest management program that covers much of the planned titling zones.

The environmental and cultural analysis, protection, and monitoring component of the project proposed here will help safeguard protected natural areas and culturally significant sites. The prime focus will be the definitive demarcation of 15 protected areas (of a total of 52), with INRENA and INC analyses of ecological preserves and historic monuments before titles are formalized. As for campesino and native communities, in addition to boundary demarcation and communal titling work the project will pay for diagnostic assessments, technical advisory support, information campaigns and training, and the development of dispute resolution mechanisms. The project will promote the use of diagnostic and consultative activities with the communities before the regulations for Law 26,505 are implemented and a pilot experience with individual titling on nearly 300 properties in selected communities after the regulations are introduced. The communities will be involved in all activities. One highlight among the accomplishments of the program's first phase was the high percentage of properties to which women received title. The 1994 Agricultural Census had found that only 4% of women farmers held title to land; according to the above-mentioned program evaluation, women accounted for nearly 15% of titles handed over. (Under Peruvian law, both spouses must sign when a parcel is registered.) Apart from stepping up promotional activities, the plan in the second phase of the program is to coordinate titling work with agencies experienced in this field.

**Benefits:**

The conclusion of an analysis of potential impacts of the proposed LTRP2 is that the operation would boost investment, enhance productivity of the targeted farmers, and give them easier access to credit. Other anticipated benefits are a gradual consolidation of agricultural holdings, more jobs, a more dynamic land market, and a shift in cropping patterns in areas brought into the process.

**Risks:**

The following are the chief risks identified: (i) **Rural land cadastre and registry maintenance.** This has to do with entering transactions in the system after titles are regularized. A records-maintenance strategy will be implemented to keep the property rolls up to date, the primary aims being to lower transaction costs, streamline the process, set up units with a specific records-maintenance mandate (a Cadastre Maintenance Bureau at PETT headquarters and regional maintenance units), conduct information campaigns to promote the country's "registration culture", and set up a Rural Cadastre Information System at PETT headquarters; (ii) **Coordinating execution.** To tighten coordination and cooperation between the various agencies involved, technical areas of the Project Coordinating Unit (PCU) will be strengthened, the role of the Advisory Committee will be heightened, and information systems will be installed in the different agencies; (iii) **Environmental and social risks.** Measures to counter these risks are described above in the section "Environmental and social review". (iv) **Institutional and financial**

**sustainability.** The institutional and financial structure of Peru's registry offices is relatively sound and stable. To make the cadastre equally solid, apart from the new rural cadastre strategy mentioned above in point (i) it has been recommended that a National Commission on Cadastre Standards be created to foster coordination among the different kinds of rural and urban cadastres. At a given point the Commission should come up with institutional and funding (government and own funds) requirements for an Integrated Cadastre System.

**Special  
contractual  
clauses:**

Before program funds could be disbursed the borrower would be required to: (i) establish a Land Titling and Registry Program Coordinating Unit and appoint an individual to head the unit and others to take charge of planning and monitoring and administration and finance (paragraph 3.8); (ii) sign agreements between the PETT and INRENA and INC for technical services required for the environmental and cultural analysis, protection, and monitoring component (paragraph 3.13); (iii) submit, to the Bank's satisfaction, the Operating Regulations for the project's execution (paragraph 3.15); and (iv) create through the appropriate legal procedures a Multisector Review Commission on National Cadastre and Land Registry Standards, with members representing SUNARP, the Tax Administration Superintendency, PETT, the Informal Land Tenure Regularization Commission, the Bureau of Lands and Survey (IGN), and the regions and municipalities (paragraph 5.4).

**Poverty-  
targeting and  
social sector  
classification:**

This operation does not qualify as a social-equity enhancing project as described in the indicative targets mandated by the Bank's Eighth Replenishment (document AB-1704).

**Exceptions to  
Bank policy:**

As an exception to the Bank's procurement policies, it is recommended that the National Aerial Photography Service (SAN) be hired directly—for an amount of up to US\$261,000—for the aerial mapping of an area of 1,124,000 hectares (justification for this recommendation is given in paragraph 3.21).

**Procurement:**

Thresholds above which international competitive bidding will be required for this project will be US\$300,000 for goods and services, US\$200,000 for consulting services, and US\$2.5 million for civil works.

## **I. FRAME OF REFERENCE**

### **A. Background**

#### **1. Economic and agriculture-sector performance**

- 1.1 Structural reforms in Peru and the country's moves to stabilize the economy and restore rural peace have had a fairly positive economic impact, in the form of stronger GDP growth, a slowing of inflation, balanced external accounts, and mounting investment. The agriculture sector expanded quickly between 1992 and 1997 but still lagged behind the rest of the economy, with a growth rate averaging 3.08% in the 1990s, barely above the 3.05% average for the second half of the 1980s. Investment in agriculture is fairly low, at 6% of agricultural GDP—well below the rate of 23.5% of GDP for the economy overall. Productivity in the agriculture sector also is much weaker than in the rest of the economy. This is the current agricultural picture in Peru despite sweeping structural reforms in the sector that freed up commodity markets, strengthened property rights and removed land-market constraints, revamped the credit market, and began to modernize institutions.
- 1.2 Peruvian agriculture has huge potential to boost exports, create jobs, and reduce poverty, but in order to realize that potential the country will need to redouble efforts to strengthen and energize the land market and increase flows of technology, investment, and capital to the sector. The process of regularizing rural property status, which was begun with the LTRP1 and will continue under the present project, will help stimulate investment, productivity, and access to credit by producer beneficiaries. It is also expected to change the cultivation model, strengthen land market, and increase employment in areas served by the project.

#### **2. Land issues in Peru**

- 1.3 Agrarian reform has had a marked impact on rural property rights in Peru. Since the process was launched in 1969 the State has acquired 13.2 million hectares of land and has adjudicated 9.4 million hectares to 438,000 families. There was little awareness in that era of the importance of legally recording ownership rights; the land registry system was in its infancy and there was no requirement that landholders record titles at the registry office. Hence, few of the agrarian-reform beneficiaries registered the title to their holdings. Accordingly, access to credit by these producers was limited to Banco Agrario and intermediaries in the informal sector when the Banco Agrario was liquidated.
- 1.4 One problem with the current distribution of farmland in Peru is its extreme fragmentation. According to the most recent agricultural census (1994), over half the country's farms were smaller than 3 hectares, and 87.6% of them were under 10 hectares.

### **3. Regularizing land tenure: accomplishments, targets, and the task ahead**

- 1.5 When the first phase of the Land Titling and Registration Project (abbreviated herein as LTRP1) that was financed by the Bank was being designed in 1996 it was estimated that only about 250,000 rural properties—less than 8% of the total—were recorded in the land registry. According to studies done as part of the preparation of the project's second phase (LTRP2), the percentage of unregistered parcels is down considerably thanks to the LTRP titling work. This is particularly evident in the Coast area on which LTRP1 focused. In the wake of the mass LTRP1 titling exercise, roughly 51% of rural parcels in the Coast region are now on the Registry Office rolls.
- 1.6 According to agricultural census numbers and other information sources there are about 4 million rural parcels in Peru, the result of a continual fragmentation of agricultural land. If we deduct around 1 million parcels located in campesino or native communities, that leaves about 3 million individual rural parcels. During LTRP1, a total of 900,000 parcels, most of them in productive valleys in the Coast region, were registered for the first time. This leaves approximately 2 million individual rural parcels whose status still needs to be regularized. The LTRP2 proposed here expects to formalize around 700,000 parcels. At the end of that project, the country's cadastre and registry agencies would have approximately 1.3 million individual parcels left to regularize.

### **4. Laws governing property ownership**

- 1.7 A key element of the structural reforms launched in 1991 was the government's plan to afford certainty as to ownership rights to land, formalize land tenure, particularly in rural areas, and expedite title registration. In pursuit of those policies a set of important laws was passed governing ownership rights. Among these were: (i) Legislative Decree 667 of 1991 regarding the Rural Property Register, which established an administrative procedure for acquisitive prescription and revamped the Rural Property Register; (ii) Decree-Law 653 of 1991 (Agricultural Sector Investment Promotion Law) which guarantees private ownership of land and permits its sale, lease, and use as mortgage security; and (iii) Law 26,505 of 1995, aimed at spurring private investment in rural land and doing away with maximum and minimum land-ownership requirements.
- 1.8 A corpus of laws liberalizing individual ownership of land was put into place in the early 1990s, but the kind of institutional support and financing needed to implement the legislation on a large scale was not forthcoming. The government's first moves to ease constraints imposed by the agrarian reform process were the 1992 establishment of the Special Rural Cadastre and Land Titling Project (PETT) under the Ministry of Agriculture, the 1994 creation of the National Superintendency of Registry Offices (SUNARP).

## **5. Campesino and native communities**

- 1.9 Peruvian law distinguishes between campesino communities with indigenous groups that held land on the coast and in the sierra and what the law terms “native communities”, consisting of tribal groups that have settled in the Selva. Any rural land titling effort in the Sierra or the Selva must be underpinned by a thorough understanding of the communities’ complex social culture. Their identification with the land and form of communal organization vary directly with their origin. Ancestral communities that existed prior to the agrarian reform were already well established as indigenous groups with their own organization, traditions, and territories. They feel most closely connected to the land and are firmly committed to communal organization. At the heart of these communities’ internal social structure is the family; social practices such as communal farming reinforce the sense of community. The campesino communities that came into being with the agrarian reform campaign are less wedded to the land and many of them have problems with their communal structure and organization. The indigenous communities were not awarded land under the agrarian reform.
- 1.10 Land use is a key element in the complex makeup of communities. Since ancestral times, inhabitants of these areas have developed engineering techniques to manage water (for irrigation) and soil (using terraces). Natural resources and crop choices are determined by climate, related to the land’s elevation. The plots farmed by community members are scattered over areas at different elevations, as a land-use strategy to attenuate farming risks associated with climate and terrain.
- 1.11 The LTRP titling activities focused on Coast valleys, which are home to only 2% of the country’s campesino communities and no native communities. Thus, the titling of these communities’ land was not a direct part of the LTRP. However, since the Sierra will be the future focus of titling work, the issue of these communities will be extremely important for LTRP2. In all, there are 6,559 campesino communities in the Sierra and the Selva and 1,267 native communities. Of these, 90 native communities and 1,601 campesino communities have title to land entered in the public registry.
- 1.12 Under Laws 24,656 and 24,657 (Campesino Community Law and the Land Registration and Boundary Act) of 1987, community lands are unattachable and inalienable and the community’s right to them is non-lapsing. The foundation of a community’s ownership of its territory is its communal organization. However, according to Article 7 of the Law, “exceptionally, the land may be alienated if such is the decision of at least two thirds of eligible community members by way of a resolution adopted at a General Assembly convened expressly and solely for that purpose”. The 1993 Constitution and Article 11 of Law 26,505 (Land Law) envisage the possibility of individual titling of land in campesino communities in the Sierra and the Selva. But that same law requires communities to regularize their communal organization pursuant to the Constitution and Article 10 of the Land



Law. Hence, this is a sequential process: the community must regularize the status of its rights in land and its communal organization before it can consider any form of disposition, encumbrance, or leasing of communal land or exercising any other act thereupon. Any such action hinges entirely upon a decision being reached democratically by community members.

- 1.13 PETT has no experience in applying Law 26,505 as regards individual titling of land in campesino community territory because the associated regulations are still not in place. As the proposed project was being prepared the team was in frequent contact with various communities and concluded that, before embarking on such an effort, multidisciplinary studies were needed on its consequences. These should be produced by public and/or private agencies with direct input from the campesino community. Social and cultural factors associated with land use, which will drive the choice of titling approach, should be examined during roundtable dialogues, and should be prominent considerations in technical assistance and information campaigns to encourage communities to become directly involved in the titling process. With this in mind, it has been agreed with PETT to conduct a pilot project involving about 300 individual titles in campesino community territory, in order to gain experience. It also was decided, following preliminary consultations, not to do any individual-titling work in native communities, since these communities indicated no interest in that form of title.
- 1.14 If the communities are directly involved in studies and roundtable discussions, activities can be planned in such a way as to avoid land titling's undesirable consequences, such as: (i) conflicts between individual landowners and the community as to ownership rights; (ii) disputes between community members over the distribution of community parcels of land; (iii) the introduction of traditions or cultural practices foreign to the community; and (iv) circumstances less conducive to crop rotation and other possible detriments to traditional farming systems and reciprocity of goods and services on the part of campesinos in the Sierra if individual titles are arranged; and (v) disputes over community rights in some natural protected areas.

## **B. First phase of the Land Titling and Registration Project**

### **1. Evaluation of the first phase**

- 1.15 The project proposed here is a continuation of the Land Titling and Registration Project (LTRP) for which the Bank's Board of Executive Directors approved loan 906/OC-PE for US\$21 million in May 1996, toward a total project cost of US\$36.5 million. During the project, the government furnished an additional US\$13.5 million, bringing the total amount disbursed to US\$50 million. The operation was declared eligible in August 1996 and was completed in December 2000, its funds having been disbursed in full. The LTRP had four components: (i) regularization of parcels of rural land, concentrating on the Coast; (ii) building of a rural cadastre;

(iii) registration of titles to rural land; and (iv) renewable natural resources management and monitoring.

- 1.16 An integral part of preparations for the second phase proposed here was a thorough review of the first phase by the Peruvian government and the Bank, focusing on: (i) physical targets; (ii) technical elements; (iii) legal and institutional elements; (iv) economic elements, and (v) environmental and social elements.

**a. Physical targets**

- 1.17 The evaluation concluded that the LTRP had exceeded its objectives, having surveyed roughly 1.9 million rural land parcels to add to the cadastre (the target had been 1.1 million parcels), and had substantially achieved its title-registration target (over 900,000 new titles recorded at Regional Registry Offices, compared to the 1.1 million target). The project also developed and pursued a fairly effective and efficient methodology for the mass-scale cadastral survey and regularization of all parcels in a zone (a “sweep” approach) that cost less than other similar projects. A national rural cadastre agency (PETT) was set up and strengthened and initial moves were taken to modernize the rural property registry system. The evaluation’s conclusions as to each of the elements reviewed are outlined below.

**b. Evaluation of technical elements**

- 1.18 The cornerstone of the project (on a map scale of 1:10,000) was the building of a rural cadastre and gathering of documentation needed to provide legal title to parcels of land in different parts of the country, through the work of Supervised Work Teams. The cadastre development activities are sequential: aerial photography, boundary demarcation and addition of parcels to the property roll, photogrammetric restitution, production of cadastre certificates, and creation of a digital cadastral database (graphic and textual data). As a parallel process, titles or proofs of holding are gathered and evaluated for title formalization purposes. The complete file is forwarded to the Public Registry Office for recording. After the mandatory public-notice stage, beneficiaries receive their title. According to the technical evaluation, a considerable period—as much as 15 months—can elapse between the field visit and final delivery of title. Moreover, the technology employed (based on traditional manual photogrammetry) is not suited to a mass-scale exercise like this parcel regularization and titling program. The technical evaluation also pointed up some weak points in the development of the project’s information system on land parcels, which made file tracking difficult. The plan is to remedy these flaws in LTRP2, to speed up the title registration process and substantially improve the property information system.

### **c. Evaluation of legal and institutional elements**

- 1.19 Turnover in management and executive staff of the Program Coordinating Unit (PCU) was high, and PETT was restructured several times. Because neither the PCU nor PETT had budget or financial autonomy they were overly reliant on the Agriculture Ministry and the United Nations Development Programme for the expending of funds. This problem was recently remedied in PETT, which was given the status of a budget execution unit. During phase two, forms of contracting will be adopted to ensure that the project's executive personnel will not change. At the outset, SUNARP's staff and pool of equipment were overwhelmed by the volume of files awaiting processing. This problem was resolved with purchases of new hardware and the hiring of more registry officers.
- 1.20 The guiding legislation for implementation of the program's first phase was Legislative Decree 667, as amended by Law 26,838. These laws prescribe a special procedure for landholders to register their title. When obstacles were encountered in the field, a corpus of more than 25 laws was put together to speed up the project. However, a number of problems still need to be resolved to expedite the second phase of the program: nonuniform application of the rule that allows discrepancies to be corrected (the remedy here being better training for registrars), and process of public notice of a parcel's registration. This is one reason for the time elapsed between a parcel's addition to the property roll and delivery of the registered title to the landowner. The regulations for notification must be observed since they help ensure the legal security of the process. However, they could be better implemented through more effective coordination between the PETT regional offices and the Public Registry Offices.
- 1.21 Another LTRP2 priority will be cadastre updating and registry maintenance. Since Peru does not have a "property registration culture", not everyone records such transactions as sales, subdivisions, parcel consolidations, or inheritances. The plan in LTRP2 is to institute a cadastre maintenance strategy, including various institutional initiatives and incentives associated with the lower transaction costs of the registration process and publicity about what people stand to gain from officially recording their land transactions.

### **d. Economic evaluation**

- 1.22 Evaluating the economic impact of LTRP1 is no easy task. Since specific controls were not devised as part of a baseline, it is hard to say for certain whether the impacts observed are attributable to LTRP1 or to other changes unfolding at the time. Legal certainty of land tenure is a necessary but not a sufficient condition to explain an increase in agricultural investment. The findings outlined below thus should be interpreted cautiously. The data used come from samples of farms in 1996-1998 in the provinces of Piura and Ica, the Third Agricultural Census (1994), MAG and SUNARP, and visits to areas in which titling work was done.

- 1.23 Since LTRP1 is so recent, no significant differences were observed in Piura and Ica investment figures that could be credited to that project. Nevertheless, findings following the 1994 census suggest that land titling is indeed having a long-range effect on infrastructure investment, so the survey findings should be taken as short-range results. The census data also confirm LTRP1's impact on field husbandry practices, which are helping to boost productivity. In Ica, the gross value of output per hectare (a partial productivity indicator) in titled and registered parcels was 67% higher than in parcels that had only been titled, and 179% higher than in untitled parcels. One also can deduce from the census returns that owners of titled and registered parcels had readier access to institutional credit and secured lengthier repayment terms and better interest rates. As for the land market, SUNARP statistics show an increase in the number of mortgages, liens, and sales of land recorded by registry offices in LTRP1 areas of influence.
- 1.24 The titling process also can affect performance of other markets such as the labor market. According to the 1994 census figures, the larger of the titled and registered holdings are the ones hiring the most workers per hectare—a finding confirmed by Piura and Ica survey numbers. When there is an active land market, land is put to its most efficient use. Thus, on land whose occupants have the most secure tenure, located in areas in which the bulk of landowners hold formal title, we can expect to find cropping patterns clearly distinguishable from those in use on plots with more tenuous status. An analysis of census data and the 1997 Ica survey reveals that farmers working titled and registered plots reduce the area planted to beans, corn, and potatoes in favor of crops like grapevines and asparagus. Those who have insecure tenure typically plant cotton because they must look to ginning mills for working-capital finance. Another finding of the Ica survey was that owners of titled, registered parcels tend to reduce their livestock herds since they have other saving and borrowing avenues.

#### **e. Environmental and social evaluation**

- 1.25 As one of the program's goals, a georeferenced agroecological and socioeconomic database was created for seven valleys in the Coast region. According to the evaluation findings, the data could not be put to full use in the titling work because of delays in producing thematic studies. As an integral part of second-phase activities the PCU will work to ensure that this information is used directly and regularly in the program's execution and monitoring.
- 1.26 Another of the evaluation findings was that PETT staff were not knowledgeable about physical elements or laws and regulations governing titling in conservation areas, ecological preserves, and archeological sanctuaries. For titling work on land in the proximity of these protected areas, PETT staff will need training in the aforementioned fields and a technical opinion will have to be sought from INRENA and the National Culture Institute (INC).

- 1.27 One of LTRP1's strongest social impacts was the strengthening and consolidation of women's rights, inasmuch as the registration procedures respect communal marital estate rights. At the time of the 1994 census one fifth of all rural producers were women with only 4% of them holding title to their land, whereas nearly 15% of titles registered in the LTRP1 zones were in women's names, making the situation more favorable when the census was taken.

## **2. The Bank's strategy in Peru**

- 1.28 The Bank is pursuing three fundamental objectives in its support for Peru: (i) to further economic modernization efforts, with special support for structural reforms, production infrastructure expansion, private investment financing, and development of a policy framework to spur efficient natural-resources management and investments in agriculture; (ii) to provide continuing assistance in the country's poverty-reduction effort, and (iii) to support modernization of the State, particularly at the provincial and local level. By strengthening title rights, the proposed project will help boost private investment in rural areas, support the modernization of government operations and, by virtue of its rural focus, help reduce poverty.

## **3. Activities of other agencies**

- 1.29 In July 1998 the World Bank approved the Urban Property Rights Project to formalize title to urban land, particularly in the poorest parts of cities. With a total budget of US\$66.3 million, the project will formalize titles, over the space of four years, to approximately 900,000 parcels in eight urban areas and develop urban titling and registry agencies. The implementing agencies are the Informal Land Tenure Formalization Commission and the Urban Property Register. Formerly part of the Ministry of Transportation, Communications, Housing, and Construction, these agencies were recently moved to the Ministry of Justice. The legal framework for this program, regulations governing proofs of holding, and the cadastre-building and titling processes are similar to the ones employed in the LTRP. Logistically, however (and on some technical points), operating a titling campaign in urban areas and in the countryside are two different exercises. In fact, the two projects complement one another and clearly attest to the importance the Peruvian government is according to the formalization and decontrol of private land ownership. The rationale for setting up an Urban Property Register was that this was an interim move to achieve greater efficiency in title legalization in a specific situation—urban shantytowns occupying land originally owned by the State. In the long term, continuing with two separate property registers will not expedite tenure regularization or help create an efficient, transparent land market. With that in mind, the government and the World Bank recently agreed that the RPU would be reincorporated into the official registry office system.

#### **4. Lessons learned, and design of the second phase of the rural titling initiative**

- 1.30 Lessons learned in the course of LTRP1 by participating bodies were the basis for the LTRP2 design. First, regularizing titles to rural land undertaken by the PETT should be a nonselective exercise on a mass scale, led off by government agencies. The LTRP1 “sweep” approach substantially lowered the process costs. The methodology used by the PETT during the LTRP1 showed the merits of grounding title regularization on a solid cadastre, i.e., georeferencing parcels in order to avoid duplications and overlaps. One clear benefit from a legal standpoint was having a corpus of laws that streamline the registration process, making it more affordable and user-friendly. Having agencies specializing in rural cadastre and land registry operations was an asset from an institutional standpoint. Two definite weak points during the first phase were inadequate information systems and problems in connecting the cadastre and registry databases and the natural resource issues database.
- 1.31 Drawing on these first-phase lessons, the plan in the second phase is to improve cadastre-building technology that the PETT would use and expand and upgrade systems to interface with the registry; establish a legal framework to make certain the cadastre and registry office are kept current, and strengthen the agencies involved in the program. Likewise building on the phase-one experience, the Ministry of Agriculture (MAG) through the PETT has devised a national rural land titling strategy in order to set priorities. The MAG will target the cadastral and titling investments to farmland in Sierra valleys and some parts of the Selva that are close to major regional centers, where there is scant tenure security and good potential for an active land market. Another strategy focus will be to formalize title to campesino and native community lands, in accordance with the communities’ determinations and by way of existing laws. Community titling will serve two main objectives: formalize a community’s rights in land—an important step to bring these communities fully into the agriculture sector—and safeguard the communities’ culture as farmed acreage increases.
- 1.32 The consulting team’s conclusion, after frequent contacts with campesino and native communities during the program’s preparation, was that this process needs to be completely participatory. One important lesson from the first phase, particularly for monitoring environmental and social impacts, is the need for a technically designed baseline and periodic surveys of key impact indicators.

## **II. THE PROJECT**

### **A. Objectives and targets**

- 2.1 The project's general objective is to continue developing an open, expeditious, transparent land market that will encourage efficient land use.
- 2.2 The proposed project activities will pursue the following specific objectives to that end: (i) afford permanent legal certainty of title to individual parcels of rural land and campesino and native community territories; (ii) further modernize the rural cadastre and rural land registry so titling work and the cadastre's expansion and updating can proceed efficiently and registry records will be kept current; and (iii) take advantage of the systematic titling exercise to help safeguard ecological reserves and culturally significant sites.

### **B. Project description**

#### **1. Cadastre, titling, and registration of rural parcels and campesino and native communities**

- 2.3 The purpose of this component (US\$22,558,000) is to deliver titles to land recorded in the cadastre and registered in land registry offices to individual rural landowners and landholders and to campesino and native communities. The component will continue with surveys and other cadastral work, titling, and registration of individual rural properties located in selected geographic areas, using an integrated, systematic "sweep" method to demarcate property boundaries and add parcels to the property roll. The loan also will fund legal and technical assistance for design of a strategy and for campesino-community land titling in the Sierra and a few areas chosen for pilot titling activities in native communities in the Selva.

#### **a. Cadastre, titling, and registration of individual rural parcels (US\$20,331,280)**

- 2.4 The project will deal first with rural parcels in the Coast region that are at any stage in the regularization process as a result of the (LTRP1). Fieldwork is complete on all of these properties (demarcation, property-roll inscription, assembly of legal documentation). What remains is largely deskwork: restitution, map production, issuance of cadastral certificates, Registry inscription, public notice, and delivery of titles to beneficiaries. The project will pay for completion of technical, legal, and administrative work needed to be able to hand over approximately 525,000 titles.
- 2.5 Project funds also are budgeted for aerial photography and mapping of 1,123,605 hectares and the completion of technical, legal, and administrative steps to formalize boundaries and legal title to roughly 250,000 parcels of rural land, all of

them in selected areas of the Sierra.<sup>1</sup> Considering the percentage of these parcels that have already been registered and factoring out parcels for which titling decisions will be challenged, the end-result of the process will be about 180,000 new rural property titles to be inscribed in the Special Sections of the Regional Rural Property Registry Offices. Adding in the parcels in the Coast region whose titles will be finalized, the LTRP2 activities will result in close to 705,000 titles that will be registered and delivered to the beneficiaries.

**b. Titling of campesino and native community lands (US\$1,661,000)**

- 2.6 This activity will help the government tackle the complex issue of ownership rights to Sierra campesino community lands. The plan is to fund the boundary demarcation, and delivery of communal title to approximately 541 campesino communities in selected areas of the Sierra. Among the criteria used to select these communities were their location in depressed areas; weaker pressure on community members' part for individual titles, the occurrence of vertical complementarity events<sup>2</sup>; the predominance, prior to the collective titling exercise, of natural pastureland; and the immemorial origin of the land. By virtue of the project activities the government will gain enough experience to issue enabling regulations for Law 26,505<sup>3</sup> on matters relating to individual titling in campesino communities, and will devise operating procedures to implement this form of titling that are concordant with communities' cultural uses. A planned pilot project is expected following the issuance of regulations to furnish title to approximately 300 individual parcels at the request of interested communities.
- 2.7 Pilot initiatives for native communities will be funded in the department of Loreto (Selva), where demarcation and communal titling of nine communities will be complete when titles are recorded in registry offices. Titling work will focus on areas in which a community has reaffirmed its desire to bolster its right to the land it holds and secure its title. As the titling activities proceed, PETT will work with INRENA to classify the community's lands by their "best use" capability and make certain that titling work observes regulations that prohibit land titling in ecological preserves. In each of these activities, including possible Law 26,505 regulations, there will be consultations with the communities, funded by the project.

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<sup>1</sup> Includes Sierra parts of the departments of Piura (1,700), La Libertad (38,000), Ancash (15,500), Arequipa (15,300), Cuzco (4,500), Junin (5,000), Apurimac (11,000), Andahuaylas (7,000), Ayacucho (7,000), Cajamarca (48,000), Chota (36,000), Huancavelica (5,000), Huanuco (6,000), and Puno (50,000).

<sup>2</sup> This system consists of a labor and goods exchange network through reciprocity mechanisms that supplement the agricultural produce in different climatic zones, thus contributing to the food security of the communities involved.

<sup>3</sup> Law governing Private Investment in Economic Activities in National Territorial Lands of Campesino and Native Communities ("Land Law").



**c. Publicity about titling and ownership rights to rural property**

- 2.8 As a crucial step in achieving the project's objectives and to reshape the prevailing "registration culture", an information and awareness-raising campaign will be conducted locally and nationwide. It will inform the general public about the importance of registering their title and updating land-registry records, and will target part of its resources to explaining the project's benefits to communities in the selected areas, especially how to make titling compatible with traditional land uses. At the local level, individuals and communities will be informed of cadastre and registry procedures, in a direct effort to persuade all landholders to be at hand when parcels are being demarcated for addition to the property roll.

**2. Strengthening institutions and the rural cadastre and land registry**

- 2.9 This component (US\$12,597,755) will strengthen the project's executing agencies (PETT and the Registry Office System) to make for more efficient cadastre development, boundary and title formalization, and registration of titles to rural property. The process of institution strengthening will help maintain and build up the government's capacity to proceed with land titling in the future.

**a. The Special Rural Cadastre and Land Titling Project (PETT) and the rural cadastre**

- 2.10 This component includes upgrades in technical and operations equipment and training for staff in technical, legal, and administrative areas for their cadastre and titling tasks. Specifically to shorten the time between a parcel's addition to the property rolls and boundary demarcation and the handover of the registered title, the project will fund the implementation of a plan to optimize and decentralize technical processes to the PETT regional offices, with the aid of state-of-the-art cadastral surveying and mapping and geographic information management technologies.
- 2.11 To help maintain the rural cadastre built up in the first phase, funds are budgeted in the proposed project to develop rural cadastre updating mechanisms and create and start up a Cadastre Maintenance Operations Bureau at PETT headquarters and Cadastre Maintenance Units in PETT regional offices. As a core part of the rural cadastre maintenance effort a Rural Cadastre Information System will be set up at PETT headquarters with 14 nodes in the regional offices, connected to the Registry Offices. One of this system's features will be the consolidation of all PETT cadastral data in a database georeferenced to parcels. This will include transformation and migration of data from 1.9 million existing LTRP1 digital cadastral plans to the new system, and entry of cadastral data from the 250,000 new parcels for which cadastral surveys will be done in LTRP2.

**b. National Superintendency of Registry Offices (US\$2,445,000)**

- 2.12 The project's objective vis-à-vis the operation of the land market will only be achieved when the real-property ownership rights evidenced by titles are inscribed in a reliable register that affords legal certainty to landowners and landholders. Accordingly, this component provides for studies to strengthen the National Registry Office System, moves to optimize the rural land title registration process, training for registrars and registry technical officers, and development and startup of an Electronic Registration System with computerized links to the rural cadastre.

**c. National cadastre and registry maintenance strategy (US\$200,000)**

- 2.13 Even when the cadastre is complete and landholders have definitive title to their property, their rights will not be legally secure unless the system is kept up to date. To make sure records are complete and current, the project will fund implementation of the national cadastre and registry maintenance strategy that was developed during the project's preparation. One aim of the strategy is to reshape Peru's longstanding "registration culture".
- 2.14 Apart from institutional measures for the rural cadastre, the strategy includes devising cadastre standards and rules and standardizing cadastral technical and administrative processes in the various agencies in charge of different kinds of cadastres in Peru (legal, fiscal, mining). In view of the complex institutional apparatus this strategy will entail, the government will create a National Commission on Cadastre and Land Registry Standards, drawing its members from the lead national and local agencies and organizations in this area. With the requisite technical assistance funded by the project, the end product of the Commission's work is to be an Integrated Cadastre System that, among other benefits, will help bolster municipal treasuries. The Commission also will determine how best to make land-registry inscription stand as proof of the registrant's legal title. This would help change the "registration culture" and also help ensure that the cadastre and registry will be kept up to date. A multipurpose cadastre and a registry with the aforementioned status are the best ways of assuring that the cadastre and registry are kept current.

**d. National Renewable Natural Resources Administration (US\$191,294)**

- 2.15 The project will pay for computer hardware and INRENA staff training to set up the agency's regional and local network to supply dynamic, timely information on INRENA activities and the PETT's clearance and titling process. This would include safeguarding reserves and wildlife, environmental conservation, and support for continuation of appropriate land titling in the selected areas.

### **3. Environmental and cultural analysis, protection, and monitoring**

- 2.16 The object of this component (US\$1,711,200) is to safeguard the legal integrity of nature preserves and culturally significant sites in the project's areas of influence and keep them intact. To that end, funding will be provided to demarcate the definitive boundaries of 15 protected natural areas (of a total of 52) including natural parks, reserves and protective forests.<sup>4</sup> An integral part of the systematic titling activity will be an analysis and classification of ecological preserves and archeological sanctuaries and historical monuments to avert any potential adverse impacts of the titling exercise. Funds also are budgeted in this component for a program to track the project's economic and socioenvironmental impacts. The monitoring work will focus on parcels in the Coast region for which titles were arranged during the project's first phase and on new parcels in the Sierra.

#### **C. Cost and financing**

- 2.17 The project will cost an estimated US\$46.7 million. The Bank will fund US\$23.3 million (49.9% of the total cost) from its Ordinary Capital. The balance (50.1%, US\$23.4 million) will be local counterpart funding. The table below gives a cost breakdown by activity and funding source.

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<sup>4</sup> Algarrobal, El Moro, Tambopata Candamo, Aymara Lupaca, and Chancaybaños Reserves; Bauaja Sunene and Cutervo National Parks; Calipuy, Titicaca Ramis, and Titicaca Puno National Reserves; Puqio Santa Rosa and Pagaibamba Protective Forests; Calipuy, Ampay, and Tabaconas-Namballe National Sanctuaries; and part of the Huascan Nature Preserve.

**COST AND FINANCING (US\$000)**

<b>Cost item</b>	<b>IDB</b>	<b>Local</b>	<b>Total</b>	<b>%</b>
<b>I. Administration and supervision</b>	<b>3,014</b>	<b>804</b>	<b>3,819</b>	<b>8.18</b>
<b>II. Direct costs</b>	<b>15,453</b>	<b>21,414</b>	<b>36,867</b>	<b>78.94</b>
2.1 Cadastre, titling and registration of rural parcels and campesino and native communities	6,709	15,849	22,558	48.30
2.2 Institution-strengthening and evaluation	7,540	5,058	12,598	26.98
2.3 Analysis, protection, monitoring and evaluation	1,203	507	1,711	3.66
<b>III. External audit</b>	<b>180</b>	<b>0</b>	<b>180</b>	<b>.39</b>
<b>IV. Contingencies (3.5%)</b>	<b>774</b>	<b>908</b>		<b>3.60</b>
<b>V. Finance charges</b>	<b>3,879</b>	<b>274</b>	<b>4,153</b>	<b>8.90</b>
5.1 Interest	3,647	0	3,647	8.78
5.2 Credit fee	0	274	274	0.06
5.3 Inspection and supervision	232	0	232	0.06
<b>TOTAL</b>	<b>23,300</b>	<b>23,400</b>	<b>46,700</b>	<b>100.00</b>

Details of the main expenditure items are as follows.

**1. Administration and supervision**

- 2.18 The US\$3,819,000 budgeted for this item (8.18% of the total project cost) will defray Program Coordinating Unit operation costs (US\$2,832,600), costs of the program coordination and technical oversight by SUNARP (US\$511,200), INRENA (US\$219,300), and a portion of costs of the national coordination and the PETT cadastre, titling, communities, planning, and administration departments (US\$256,000).

**2. Direct costs**

- 2.19 This cost category (US\$36,867,000, accounting for 78.94% of the total project cost) takes in direct costs of the following components.
- a. **Cadastre, titling, and registration of rural parcels and campesino and native community lands** (US\$22,558,280). These funds will be used to hire technical officers for specific tasks involved in cadastral boundary marking and adding properties to the official roll, formalization of boundaries and of legal title, preparation of cadastral plans and assembly of legal files, and registration and delivery of rural property titles (US\$17,922,205), and for formalization, demarcation and titling of campesino and native communities (US\$1,500,000); to hire specialized services firms for aerial photography of rural land at a scale of 1:30,000 or 1:15,000, as appropriate (US\$261,000); to hire a specialized services

firm for aero-triangulation of aerial photos, production of orthophotos at scales of 1:10,000, 1:5,000 or 1:2,500, procurement of specialized hardware and software and training and capacity-building in PETT (US\$2,148,075); to design and run an information campaign to explain the importance of titling and rural land ownership rights (US\$566,000); and to hire consultants to produce studies with legal and technical assessments of titling in campesino communities (US\$161,000).

- b. **Strengthening rural cadastre and registry agencies and the rural cadastre and registration system** (US\$12,597,755). These funds will pay for the work of specialized services firms engaged to establish and start up the Georeferenced Rural Cadastre Information System (US\$2,679,600), including equipment, training, and migration of existing cadastral data to the new system; development and implementation of the Management Information System, including a system for tracking legal files (US\$300,000); development and startup of an Electronic Registry in SUNARP's regional and local offices (US\$1,000,000); hiring of consultants to optimize the rural cadastre, titling, and registration processes (US\$150,000); studies and workshops to develop an integrated national cadastre system (US\$200,000); improvements in PCU and PETT management, administration, and financial management (US\$280,000); technical training for PETT personnel (US\$355,800); studies to strengthen and optimize the registry system and training for registrars in SUNARP registry offices (US\$1,005,000); hiring of technical personnel to design rural cadastre maintenance procedures and start up cadastre maintenance units in PETT offices (US\$1,529,881); procurement of computer hardware and software and specialized cadastral surveying and mapping apparatus (US\$3,760,180); vehicles for PETT headquarters and regional offices (US\$706,000); computer and networking hardware for regional and local land registry offices (US\$440,000); and hardware purchases for INRENA's regional and local information network (US\$191,294).
- c. **Environmental and cultural analysis, protection, and monitoring** (US\$1,711,200). These funds will pay for consultants for a legal analysis and design of operating procedures to safeguard reserves and other protected areas during the titling exercise (US\$86,500); technical personnel to be hired to produce analytical studies needed to demarcate protected areas and keep them intact (US\$1,336,700); the services of a specialized firm to develop and implement a system to monitor the economic and socioenvironmental impacts of titling (US\$265,000); and purchases of specialized equipment and satellite imaging to bolster INRENA's geographic information system (US\$23,000).

### **III. PROGRAM IMPLEMENTATION**

#### **A. Organization for the program's execution**

- 3.1 The program will be executed by the Ministry of Agriculture through the Program Coordinating Unit (PCU), which will receive strengthening to assist it with this task. Other organizations involved in the program are PETT and SUNARP, making investments for the cadastre and registration component, and INRENA and the INC as advisory agencies for the environmental and cultural analysis, protection, and monitoring component. There are plans to strengthen the Advisory Council based in the Agriculture Minister's office; it will continue with its first-phase mandate of general coordination and interagency oversight throughout the program. The organizational setup proposed for the program and the respective functions are described below.

##### **1. Advisory Council**

- 3.2 The Advisory Council will operate out of the Office of the Minister of Agriculture. Its members will be representatives of that ministry, the Ministry of Economic Affairs and Finance, PETT, and SUNARP. The Council will be chaired by the Minister of Agriculture or the Minister's delegate, with the PCU Chief as Permanent Secretary. From time to time, the Advisory Council will also invite representatives of INRENA, the INC, and representatives of the program beneficiaries, including campesino and native communities, to see how the program is progressing and to discuss any corrective steps that may need to be taken. It will meet at least twice yearly and may call special meetings as required. Its terms of reference are to: (i) shape a unified vision among participating agencies in line with national rural land titling objectives, plans, and criteria and contractual commitments to the Bank; (ii) approve the initial four-year work plan and annual work plans; review the outcomes of each plan and problems encountered; make recommendations, if targets are not being met or there are deviations from policies or objectives, and direct the PCU and participants to make the requisite adjustments, and (iii) foster interagency coordination and take the initiative to resolve interagency problems that, by their nature, fall outside the PCU Chief's sphere of authority. The Council also will have authority to appoint the PCU Chief, in accordance with terms of reference agreed on with the Bank.

##### **2. Program Coordinating Unit**

- 3.3 Since 1997 some Peruvian government departments and units have been given the status of "Budget Executing Units". A unit may be so designated when the Ministry of Economic Affairs and Finance is requested by the sector Ministry for the unit to be given autonomy to administer its budget (commit funds, order and account for payments). Because the PETT is a budgetary execution unit, the PCU will be set up

as a self-contained unit attached to the PETT with responsibility for program management. The functions will be as follows.

- 3.4 **Technical:** (i) coordinate program planning, including preparation of the initial four-year plan and annual work plans with participation of the executing agencies; (ii) monitor, supervise, evaluate, and coordinate with those in charge of the program components operations work to adjust the program activities; (iii) draw up or help draw up terms of reference and bidding documents and assist in goods and services procurement, adhering to Bank requirements; and (iv) provide technical support to the participating agencies so components can be implemented on schedule, including the institution-strengthening activities.
- 3.5 **Financial:** (i) coordinate with PETT timely implementation of computerized systems for mechanical consolidation of program accounting; (ii) coordinate and monitor for timely submission of financial statements and reports of the program; (iii) monitor to ensure timely compliance with financial conditions; (iv) analyze each program component's budget performance, determine reasons for underruns or overruns; and (v) take the initiative to have internal and external auditors' recommendations promptly implemented.
- 3.6 **Management/control:** (i) ensure that plans are adhered to and operational controls are observed so the annual and program objectives will be achieved, devising and instigating adjustment measures where necessary in coordination with those responsible for implementation of the various components; (ii) promote coordination, communication, and interface of the desired objectives among the project participants through preestablished programs; and (iii) represent the project, acting as liaison with the Bank and Peruvian agencies.
- 3.7 Building on the phase-one experience, the PCU will be divided into the following units reporting to the Chief, to perform the above-listed functions: Administration and Finance (Logistics and Accounting), Planning, Programming, and Monitoring, and Fieldwork Supervision. There will be advisory personnel to help with information technology and systems and legal matters and social aspects of the program.
- 3.8 The additional PCU personnel required will be recruited locally, using methods that assure competition and transparency. The PCU Chief will be a professional manager with a solid track record in developing and implementing medium-scale and large projects funded by multilateral banks. The staff will include four professionals and five technical officers. PCU costs will total US\$2.8 million, including personnel, equipment, office expenses, consultant costs, and a vehicle. **As a condition precedent to the first disbursement, the borrower must set up the PCU, appoint the Chief of the Unit, and those in charge of programming and monitoring and financial management.**

## **B. General implementation arrangements**

- 3.9 The **cadastre, titling, and registration component** calls for activities on three main fronts: (i) individual rural land parcels; (ii) campesino and native communities; and (iii) publicity. The rural cadastre and titling process of which PETT is in charge consists of three core activities: (i) building and computerizing a parcel-based cadastre; (ii) titling of land, whether State-held or adjudicated where title has not been passed to the beneficiaries; and (iii) regularization of tenure for landholders and other small landowners. The registration process headed by SUNARP involves recording titles in the Special Rural Property Sections of Registry Offices following the streamlined parcel-registration procedure mandated by Legislative Decree 667. There are three main steps to the registration process: (i) legal review of files created at the PETT boundary and title regularization stage; (ii) registration of ownership rights and if there is no challenge to the title, inscription of title or tenure rights; and (iii) public notice of the title's registration.
- 3.10 During the first phase a "sweep" methodology (mass-scale regularization of parcels in a given zone by Supervised Work Teams hired directly by PETT) was adopted by the PETT. The cornerstone of this approach is the integration of cadastre work (boundary marking) and parcel formalization in a single process, with systematic visits to every cadastral unit plotted in the aerial mapping of the zone.
- 3.11 In the second phase, the use of modern orthophotography technology will enable much of the rural cadastre work to be decentralized to PETT regional offices. SUNARP, for its part, will handle the registration of rural parcels and community lands at the Special Rural Property Sections in its regional registry offices. Each such office has a core work team made up of a registrar, registry technician, and digitizer. SUNARP will receive the equivalent of US\$5 from the program for each title that PETT transmits to it for registration. SUNARP will use these funds to defray staff and office costs, including additional temporary personnel of the kind indicated above to keep the registry up to date.
- 3.12 As in the first phase there will be a Coordinating Unit at SUNARP headquarters, employing six professionals under contract—a coordinator, a budget specialist, an information technology and systems consultant, a lawyer for quality assurance of parcel registration, and two programmers. The four-year cost of this unit will be US\$511,200.
- 3.13 PETT will also execute the environmental and cultural analysis, protection, and monitoring component, with technical support from INRENA and the INC to gather information on ecological areas and cultural sites that will need to be safeguarded during the rural cadastre, titling, and registration process for individual parcels and community lands. INRENA and the INC are equipped to provide classification and boundary demarcation services for ecological preserves and culturally significant sites. INRENA was involved in the first phase by way of an



agreement signed with the PCU. **The signing of agreements between the PETT and INRENA and the INC will be a condition precedent to the first disbursement of the loan.**

**C. Implementation methods and guidelines**

- 3.14 The roadmaps for the program's operation will be an initial four-year plan and the year 1 work plan, drafted as part of preparations for the project. Future annual work plans will be put together at workshops held every year in the month in which the government budget exercise begins. Taking part in these PCU-led workshops will be representatives of the executing agencies and evaluation and programming consultants.
- 3.15 The methods, processes, and regulations devised in the course of LTRP1 are solid guidelines for LTRP2. Nevertheless, as a general information tool, information on the project's objectives, assigned responsibilities, activities, and implementation processes have been compiled in a set of preliminary project operating regulations. The final version will be produced with assistance from PETT-funded consultants. **Presentation of these regulations will be a condition precedent to disbursement of the loan.**

**D. Implementation timetable**

- 3.16 The program will operate for four years. The following is the investment timetable by funding source.

**Investment timetable  
(US\$000)**

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Total</b>	<b>%</b>
IDB	6,149.3	9,320.4	4,468.0	3,334.7	23,300.0	49.9
Govt. of Peru	6,763.2	10,450.7	4,623.9	1,543.7	23,400.0	50.1
Total	12,912.5	19,771.1	9,091.9	4,927.5	46,700.0	100.0
Percentage	27.6	42.3	19.5	10.5	100.0	

**E. Financial administration of the program**

- 3.17 As the budgetary executing unit, the PETT will be responsible for the financial management of the program. These functions will entail: (i) preparing on a timely basis budgets and keeping updated accounting records of budgetary performance and project accounting, (ii) obtaining as required the loan resources and local counterpart funding and proper management of a cash flow system and flow of

funds information, and (iii) preparing as required financial information and consolidated financial statements in accordance with the Bank's requirements.

- 3.18 The internal control and financial reporting system will include at least the elements listed here: (i) the project accounting system will be automated to allow automatic consolidation of accounting records of PETT and SUNARP components, (ii) separate entries will be kept for budgetary resources used for PETT and SUNARP components, (iii) different bank accounts will be used for loan resources in order to segregate reimbursements to the PETT and SUNARP, and (iv) the PETT program accounting unit will have the necessary staff to perform its financial and accounting operations and the accounting unit will have an operating manual describing activities and responsibilities thus facilitating the performance and differentiation of the PETT's regular financial activities.
- 3.19 A revolving fund of 5% of the loan amount will be set up. Supporting documents for all expenditures must be kept on file. Direct payments for goods and services under local and international competitive bidding, hiring of personnel, specialized consulting services and minor purchases to be covered out of the proceeds of the loan and the local counterpart funding will be made by PETT. To facilitate execution at the regional level, when payments are effected for goods, fees, and services provided for in the annual work plans and on the basis of the agreements entered into with the participating entities, the PETT will make the necessary transfers of funds to the deconcentrated bodies of the PETT and Regional Property Offices, which must report on these operations at certain fixed times.

**F. Internal and external audits**

- 3.20 Internal audits of the program will be conducted by the Agriculture Ministry's General Audit Office. Annual audit plans are to be sent to the Bank for its information. The program's financial statements, duly audited by a firm of certified public accountants acceptable to the Bank, will be sent to the Bank each year during the life of the program, within 120 days after each fiscal year-end. External audit costs will be defrayed out of the loan proceeds.

**G. Procurement**

- 3.21 The Bank's procedures will be followed for goods and services procurement. Thresholds above which international competitive bidding will be mandatory are US\$300,000 for goods and related services, US\$200,000 for consulting services, and US\$2.5 million for construction work. Calls for bids for items below these thresholds will follow procedures prescribed in Peruvian law. As an exception to these procedures, the Executing Unit will engage the National Aerial Photography Service (SAN) directly to carry out the aerial mapping of a rural area of 1,124,000 hectares. This exception is justified on grounds that (i) it will permit a close technical relationship that developed during phase one between the project and

SAN to continue, thus contributing to the production of quality documents by the required deadline, and (ii) in light of the amount of the contract, it would be the only alternative to ensure that aircraft are available as required, a factor which is essential given the adverse meteorological conditions in the project area during most of the year and SAN's understanding of the project area in poor flying conditions.

## **H. Maintenance**

- 3.22 The Ministry of Agriculture (MAG) and the agencies involved in the project components will include a line in their budget for maintenance to keep program-funded equipment and vehicles in good working order. Within the first three months of every fiscal year, starting the year of purchase of the equipment and vehicles and for five consecutive years, the MAG and the participating agencies (via the MAG) will give the Bank a report on maintenance work performed the previous year and plans for the following year, including evidence of maintenance line items in the budget for the following year.

## **I. Program supervision, monitoring, and evaluation**

- 3.23 As an adjunct to the evaluation by the Country Office of the semiannual reports that are to be submitted to the PCU, program supervision provides for annual meetings to examine the degree to which the annual work plans have been accomplished. One feature of the supervision process will be a midterm review that will (i) report on the status of each component and (ii) assess the modernization gains achieved in PETT, SUNARP, and INRENA with support from the program. The annual work plans will describe the rate of advance of the different processes, outfitting, and training included in the institutional modernization and strengthening component.
- 3.24 One crucial element for the final evaluation of the program will be a carefully constructed baseline against which to measure successive changes in the program's key economic, social, and environmental parameters. In addition to the yardsticks used in LTPR1, two measuring instruments will be used to construct the baseline: (i) a module on economic, social, and natural-resources management impacts in the 2000 National Living Standards Survey, on which design and initial survey work was done during the project preparation stage, and (ii) a smaller survey that PETT regional offices can conduct periodically. There are three main sets of indicators:
- a. **Economic variables:** investment and productivity; credit access, sources and cost; land market transactions and use of title as security in commercial transactions.
  - b. **Social:** time distribution and uses by household members; changes in traditional land uses and reciprocal relationships of labor and goods within the

communities; gender of the official owner of the land parcel and credit access, by gender, of heads of household.

- c. **Environmental:** intensity and pattern of natural-resources use; pattern and use of agricultural inputs.

- 3.25 Supplementing the above-listed variables, as a control, will be: household size and makeup, educational attainment, unmet basic needs, farm and herd size, access roads, involvement in organizations and other public interventions (education, health, nutrition). Initial values for the indicators were obtained from the May-June 2000 Living Standards Survey. Titling activities for campesino and native communities will be monitored and evaluated by an independent organization (a firm or NGO) engaged for the purpose. This body will report periodically to the PCU and the entities participating in the project (PETT, SUNARP, INRENA, INC) on the results of the monitoring activities, so that any corrective action that may be needed can be taken on a timely basis. Information built up during both phases of the program will be used for a final evaluation funded by the program.

#### **J. Environmental and social impact analysis**

- 3.26 The following are potentially important areas in which the titling process could affect the environment: (i) use of chemical inputs that could impair water quality; (ii) potential conflicts of the titling project with nature reserves, ecological preserves, or culturally significant sites; (iii) implications of the titling and registration of campesino and native communities; and (iv) implications of the titling-process requirement of evidence that land is being used for agricultural purposes.
- 3.27 On the matter of a potential increase in farm-chemical use: Peru is currently executing the Bank-funded Animal Health and Plant Protection Program (1025/OC-PE). A key focus of that operation is the promotion of integrated pest management, introducing biological controls in about 25% of the land planted to major crops in Coast and Sierra valleys where the titling work is concentrated. Work also has been done in the program to come up with an effective regulatory framework governing chemical inputs; one of its tasks is to implement a system to monitor and control farm-chemical use and chemical residues on agricultural products.
- 3.28 As for potential conflicts relating to nature or ecological preserves or culturally significant sites, the proposed environmental and cultural analysis, protection, and monitoring component has as its objective to “afford assurances as to the legal integrity of nature reserves and culturally significant sites in priority areas of the project and keep them intact, by way of cadastral surveys and definitive demarcation of boundaries, as a foundation for conserving such areas”. Another of that component’s aims is to streamline the framework of land-titling laws and

regulations with respect to natural-resources use. Expected outputs of this activity are cadastral surveys and defined boundaries, legally registered, for national parks, permanent forest reserves and equivalent reserves, and historic monuments and archeological sites in the titling areas.

- 3.29 Another possible source of conflict between the titling process and natural-resources conservation is the requirement that landholders demonstrate that they are using their land for agricultural purposes (“economic exploitation”), as evidence of possession. Article 27 of Legislative Decree 667 states that “The verifier must ascertain, by visual inspection, whether the rural parcel is being used for agricultural purposes. Specifically, the verifier must ascertain whether land has been planted to crops or is supporting livestock (depending on the land’s carrying capacity) or, in the event, if the landholder is preparing the soil. Rural land that is in a rest period will be considered to be land being used for agriculture.” There have been insinuations that this requirement could trigger the destruction of forests so landowners could prove they were using their land for agriculture. This risk is minimal because the Coast and Sierra zones targeted as priorities for titling are in fact being farmed because of their soil and other growing conditions. Ultimately, what the verifier is trying to do is make sure the land is not in an abandoned state. The project has no budget to go into forested (Selva) areas, except for a pilot exercise in selected native communities. Furthermore, there are other laws prohibiting land titling in forest reserves, protected areas, and ecologically significant zones. To avoid problems on this front the law requires a prior opinion from INRENA in zones falling into those categories.
- 3.30 One of the program’s first-phase accomplishments was the high percentage of parcels to which women received title. The Third Agricultural Census revealed that 20% of the nation’s farmers were women but only 4% of women farmers were registered titleholders. The evaluation found that widowed and divorced women and those who had inherited land accounted for close to 15% of the titles delivered. The percentage varies by region: in 1999 in the Department of Piura, for instance, almost 55% of a sample of 5,600 titles were held by women. In the second phase of the program, this kind of indicators will be evaluated against the baseline, together with access to credit for women when they are heads of household of the rural property. The program also will design modules tailored to women into all its training activities and campaigns to publicize the benefits of titling and registration. Joint activities will be organized with advocacy organizations that are working to secure land titles for campesino women. This would consolidate the gains achieved in LTRP1.
- 3.31 With regard to campesino and native communities, it has been decided with the government agencies to focus on boundary demarcation and registration of communal ownership rights in approximately 541 campesino communities and, as a pilot project, in about nine native communities. The following actions will be taken before titling work begins, to give these communities information and educate them

about the importance of titling and forms and uses of titles to enhance the security of their ownership rights: (i) participatory diagnostic studies on land distribution in the communities and their social and cultural organization; (ii) workshops to inform communities about the project, forms of titling and their implications, and provide them with training; (iii) training for regional technical agents that will be working with the communities; (iv) building technical capacity for land-dispute resolution; and (v) carrying out the consultative process and drawing on the experience gained to have regulations issued under Law 26,505 regarding campesino communities in the Sierra.

3.32 The main activities planned in regard to environmental and social aspects are:

- a. Regulation, management, and control of chemical inputs: Animal Health and Plant Protection Program (1025/OC-PE).
- b. Environmental and cultural analysis, protection, and monitoring: US\$1,711,200 (includes US\$265,000 to monitor the primary economic, social, and environmental impact indicators).
- c. Information campaign to explain the importance of titling and property rights (includes modules on women and communities): US\$566,000.
- d. Legal and technical diagnostic studies on campesino community titling: US\$300,000.
- e. Hardware for the INRENA national and local information network: US\$191,294.

#### **IV. THE BORROWER AND AGENCIES PARTICIPATING IN THE PROGRAM**

##### **A. Borrower and executing agency**

- 4.1 The borrower will be the Republic of Peru. The executing agency will be the Ministry of Agriculture (MAG), through the Project Coordinating Unit, which is attached to the PETT, for the Land Titling and Registration Project that will coordinate the program's implementation. PETT will effect investments for the cadastre and titling activities and SUNARP for title inscriptions in Registry Offices. For their work in ecological preserves and culturally significant areas PETT and SUNARP will commission advisory support from INRENA and the INC.

##### **B. Institutional features**

###### **1. Ministry of Agriculture**

- 4.2 The MAG is one of 15 Peruvian ministries. As the policy-setting agency for the agriculture sector its mandate is to promote sustained agricultural development, formulating, coordinating, and evaluating national agriculture policies and overseeing and enforcing agricultural legislation. Its central operations consist of the General Audit Office, Planning Office, Legal Office, Administration Office (personnel, procurement, accounting, and cash management), and the Agricultural Information Office (statistics). The ministry's technical operations are spread over 26 deconcentrated public bodies known as regional agrarian divisions.
- 4.3 The MAG budget for 2001 is US\$140 million. The ministry's central administration will receive US\$54 million; the balance is for the "Special Projects" line. The budget covers a workforce of 3,834—380 staff positions, 2,004 contract employees, and 1,450 under nonpersonnel services.

###### **2. Special Rural Cadastre and Land Titling Project (PETT)**

- 4.4 This agency was created in 1992 by way of DL 25,902. It is a technical and normative body with nationwide responsibility for boundary and title formalization of parcels of rural land that were expropriated and adjudicated as part of the agrarian reform, as well as privately owned rural parcels and uncultivated arable land that is freely available to the State to transfer to private hands. PETT is in charge of cadastral surveys, modernization, strengthening, maintenance, and updating of the country's rural cadastre.
- 4.5 **Organization.** Headed by an Executive Director, PETT has two line divisions—the Rural Cadastre Department and the Titling and Regularization Department, in charge of PETT's technical work; two staff divisions—Planning (technical and financial planning, policies, and programming) and Legal Counsel; an

Administration Office (personnel, procurement, accounting, and budgeting), and an Internal Audit Office. PETT's 24 regional and 3 subregional offices report to the Executive Director.

- 4.6 In January 2001 PETT had 315 people on staff, 134 of them based at headquarters and 181 in the regional offices. Of these, 99 had fixed-term contracts for specific services (as part of the regular complement of staff) and the rest were temporary employees on short-term employee service contracts. The complement of staff breaks down into 32 executive, advisory, and consultant positions, 56 professionals, and 11 technical officers. The short-term contract staff consists of 99 professionals, 149 technical officers, and 49 support workers.
- 4.7 **Financial management.** The Executive Director has delegated the management of PETT finances to the directors of Planning (budget) and Administration (accounting and cash management). The agency's finance function is performed by budget, accounting, and cash management units that operate independently in order to satisfy finance area internal-control requirements. Financial administration procedures are based on rules issued by the Ministry of Economic Affairs and Finance, supported by an Integrated Financial Management System (SIAF) developed by that ministry, which is mandatory for government departments and agencies. With this computerized system PETT can record all four spending stages—commitment, obligation, warrant, and disbursement. As part of the system there are arrangements for filing supporting documentation for expenditures. PETT will keep accounts for the IDB project using the existing SIAF. Data from the system will serve as inputs for reports to be produced by the PCU using a parallel system developed during the program's first phase. This system is working quite well but will be modernized in phase two of the program so that accounting information can be transmitted electronically to the PEU for consolidation.

### **3. The National Superintendency of Registry Offices (SUNARP)**

- 4.8 SUNARP was created in 1994 as a decentralized autonomous justice-system agency in charge of the National Registry Office System. Its mandate is to issue policies and technical-administrative rules and standards for the country's official Registry Offices. It is responsible for planning, organizing, setting standards, managing, coordinating, and overseeing the inscription of deeds and contracts in public records offices that comprise the National Registry Office System, and for public notification. SUNARP is headquartered in Lima.
- 4.9 **Organization and staff.** Reporting to SUNARP's authorities are line, staff, and support employees. Senior authorities are the Board, the Superintendent, the Deputy Superintendent, and the General Manager. The Board approves policies; the Superintendent implements them, sets objectives, is in charge of overall management and oversight of SUNARP operations, and is the agency's legal representative. The General Manager directs and oversees SUNARP's day-to-day



operations. The line functions are performed in 64 deconcentrated Registry Offices that handle registration operations in 13 regions across the country.

- 4.10 Staff units are the Budget and Development Department and the Legal Department. Support departments are Administration and Finance, Public Relations, Information Technology and Systems, and the Registry Training School. SUNARP also has an Internal Audit Office that reports administratively to the Superintendent but for operations purposes to the Office of the Comptroller General of the Republic.
- 4.11 **Financial management.** SUNARP's finances are administered by its Budget and Development and Administration and Finance departments. Its finance function is performed by budget, accounting, and cash management units that operate independently in order to satisfy finance area internal-control requirements. Financial administration procedures are based on rules issued by the Ministry of Economic Affairs and Finance (MEF), supported by an Integrated Financial Management System (SIAF) and a Management Information System developed by SUNARP for head-office and regional administrative and financial management. Both those systems are mandatory for all Registry Offices. With these computerized systems SUNARP can record the successive stages of expenditures in keeping with MEF requirements, and all administrative and financial operations, which are consolidated at SUNARP headquarters. As part of the systems there are arrangements for filing supporting documentation for expenditures. For the IDB project accounts, SUNARP reports expenditures to the PETT and the PCU to produce consolidated financial statements.

**C. Financial aspects**

**1. PETT expenditure**

- 4.12 The following table summarizes expenditures in the last four years (1997-2000) for PETT by source of funds (in constant 2000 U.S. dollars).

(thousands of December 2000 dollars)

Year	1997	1998	1999	2000	Average	% share
<b>CURRENT EXPENDITURE</b>	2,606	2,443	1,895	2,522	2,367	16.1
Government of Peru	2,478	2,358	1,681	2,106	2,156	14.6
Own resources	128	85	214	416	211	1.4
<b>CAPITAL EXPENDITURE 1/</b>	11,920	12,890	17,427	7,205	12,361	83.9
Local resources	11,385	7,771	10,947	5,371	8,875	60.3
Government of Peru	11,323	7,765	10,964	5,367	8,855	60.1
Own resources	62	6	10	4	21	0.1
External resources (IDB)	535	5,119	6,453	1,834	3,485	23.7
<b>TOTAL EXPENDITURE</b>	14,526	15,333	19,322	9,727	14,727	100.0
1/ Of which the IDB program:	9,554	11,129	12,092	5,826	9,650	65.5

- 4.13 Current expenditure over this four-year interval averaged US\$2.4 million equivalent (16% of total expenditure). The average annual capital outlay was US\$12.4 million (84% of total spending). The IDB program's cadastre and titling component accounted for 78% of capital spending (66% of total expenditure). The pace of execution of the program thus affected annual changes in overall spending.
- 4.14 The government funded virtually all current expenditure and about 72% of capital expenditure. The IDB loan funded the other 28% of capital costs.
- 4.15 PETT's own revenues are modest, averaging US\$231,000 a year over the period reviewed here. They come from fees and other charges for PETT services relating to titling, sale of plans, land adjudication, and plot inspections. Revenues in 2000 were US\$420,000, up 88% over the 1999 figure, and are expected to remain at around that level in the coming years, defraying about 10%, on average, of projected recurrent expenditures.

## 2. SUNARP expenditure

- 4.16 The following table summarizes SUNARP headquarters expenditures in the last four years (1997-2000) by source of funds, in constant 2000 U.S. dollars.

(thousands of 2000 dollars)

Year	1997	1998	1999	2000	Average	% share
<b>CURRENT EXPENDITURE</b>	1,581	1,742	2,349	3,008	2,170	41.2
Government of Peru	1,112	1,060	964	858	999	19.0
Own resources	469	682	1,385	2,150	1,171	22.2
<b>CAPITAL EXPENDITURE 1/</b>	2,096	1,683	4,975	3,639	3,098	58.8
Local resources	1,333	1,394	1,173	3,232	1,783	33.8
Government of Peru	1,267	1,289	970	598	1,031	19.5
Own resources	66	105	203	2,634	752	14.3
External resources (IDB)	763	289	3,802	407	1,315	25.0
<b>TOTAL EXPENDITURE</b>	3,677	3,425	7,324	6,647	5,268	100.0
1/ Of which the IDB program:	1,993	1,551	4,769	998	2,328	44.2

- 4.17 SUNARP's current expenditures averaged US\$2.2 million a year over this period (41% of total spending). Average annual capital outlays came to US\$3.1 million (59% of total expenditure). The ratio of current to capital expenditure is high because of SUNARP's investment outlays over the four-year interval and the agency's regulatory function, which requires professional and technical staff. In absolute terms, current expenditures climbed from US\$1.6 million in 1997 to US\$3 million in 2000, the result of increased spending on staff and related goods. Capital outlays ranged from a low of US\$1.6 million in 1997 to a high of about US\$5 million in 1999, reflecting the execution of the IDB program that accounted for about 75%, on average, of capital expenditures over the period.
- 4.18 On average, roughly 46% of SUNARP's current expenditures were funded by the government and 54% by the agency from own resources. The government financed 33% of capital outlays, SUNARP 24% from its own revenues, and the Bank 43%.
- 4.19 As was noted earlier, SUNARP operates 64 registry offices in 13 regions. These bureaus charge for registry services and remit 2% of the fee revenues to SUNARP, where they become part of the agency's "own resources". With the other 98% of their fee intake the regional offices fully fund their current and capital expenditures. Over the interval examined here, the offices' annual current expenditure averaged US\$25.4 million; the capital-expenditure average was US\$7 million. The corresponding averages for SUNARP headquarters were US\$2.2 million for recurrent expenditure and US\$3.1 million in capital spending.

### 3. Phase one of the program: consolidated spending figures

- 4.20 The following table summarizes expenditures from 1997 to 2000 for the program's first phase.

(thousands of 2000 dollars)						
Year	1997	1998	1999	2000	Total	% share
PROJECT TOTAL	11,859	12,884	17,397	7,152	49,292	100.0
Government of Peru funds	10,334	7,271	6,607	4,614	28,826	58.4
IDB loan	1,525	5,613	10,790	2,538	20,466	41.6

- 4.21 Included in the totals, along with PETT and SUNARP expenditures, are costs of the PEU (US\$2,137,000) and INRENA (US\$3,366,000) and the inspection and supervision charge of US\$146,000.
- 4.22 Two items about the above table are noteworthy: (i) the US\$28.8 million local counterpart total for the four years is 1.87 times the US\$15.4 million originally programmed for this period; and (ii) the largest counterpart contribution (or maximum demonstrated annual counterpart capacity) was US\$10.3 million, in 1997.

## V. PROGRAM VIABILITY AND RISKS

### A. Technical viability

- 5.1 The project's technical underpinning is the systematic, integrated process of building a rural cadastre and assembling documentation to legally settle titles to parcels of rural land in selected priority areas in Peru, performed by Supervised Work Teams. Based on this cadastre and the definitive formalization of landowner and landholder rights, a reliable rural property registry system with georeferenced parcels can be created to provide complete and accurate information and prevent errors in official registers.
- 5.2 During the first phase of the Land Titling and Registration Project (LTRP1) there were lengthy delays between the field work and delivery of titles to beneficiaries. In the proposed second stage (LTRP2), high-tech tools will be used to produce cadastral maps, including digital orthophotography and global positioning systems to capture boundaries. Since restitution work will be faster than with manual methods, cadastral plans can be produced much more quickly.
- 5.3 The rural cadastre maintenance strategy to be adopted in LTRP2 will capture land-market transactions in which ownership changes hands (purchase/sale, inheritance) or parcel perimeters change (fragmentation or consolidation of parcels). The crucial element here will be the participation of registered owners, who must report any change in holdings or boundaries to the registry office and the cadastre.
- 5.4 In an attempt to reshape the country's "registration culture", LTRP2 will combine actions on the social, institutional, administrative, technical, and legal fronts. On the social side there will be an aggressive information campaign to explain the rights and responsibilities of registered titleholders. Institutional activities will include devising provisions for a National Commission on Cadastre and Land Registry Standards. To ensure that the rural cadastre is kept up to date, the project will establish and start up a Rural Cadastre Maintenance Operations Bureau at PETT headquarters and Cadastre Maintenance Units in PETT regional offices. The project includes administrative measures to devise and institute standards, proactive mechanisms and dedicated technical resources for rural cadastre maintenance and updating once the systematic boundary demarcation and regularization process is complete. Accordingly, **before proceeds of the loan can be disbursed the government must have created using the proper legal procedures a Multisector Review Commission on National Cadastre and Land Registry Standards, made up of SUNARP, SUNAT, PETT, COFOPRI, IGN, and regional and municipal representatives.** The Commission's mandate will be to devise a strategy, laws, and technical standards for cadastral data processing and updating, to satisfy the requirements of agencies that use this information. SUNARP will serve as Technical Secretariat of the Commission.

- 5.5 One of the technical strengths of the process is the interface of the PETT rural cadastral database with Registry Office databases in order to support dynamic data maintenance. In LTRP2 a georeferenced Rural Cadastre Information System will be put into place and connected to the Rural Property Registry. The Registry Office, for its part, will start up an Electronic Registration System connected electronically to the Rural Cadastre Information System.

## **B. Institutional and financial viability**

### **1. Institutional viability**

- 5.6 As a result of the program's first phase, PETT has built up expertise in rural land title regularization processes and has the requisite equipment, effective methods, and hundreds of trained personnel. The first stage also was instrumental in establishing and strengthening SUNARP, having equipped the agency, produced technical, economic, and legal studies, and trained registrars and technical personnel. These gains will be solidified in the second phase as modern technologies are brought in to completely computerize registry entries and link them to the cadastre. Given this growing institutional capacity and the experience gained in pursuing the first-phase targets, the program can be expected to be even more institutionally viable in the second phase.

### **2. Financial viability**

#### **a. PETT expenditure projections and funding**

**PETT budget projections (thousands of December 2000 dollars)**

<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>Average</b>	<b>% share</b>
<b>CURRENT EXPENDITURE</b>	3,724	3,730	3,737	3,744	3,753	3,738	31.1
Government of Peru	3,399	3,399	3,399	3,399	3,402	3,400	28.3
Own resources	325	331	338	345	351	338	2.8
<b>CAPITAL EXPENDITURE 1/</b>	9,645	15,051	5,944	2,458	2,666	8,274	68.9
Local resources	5,412	8,169	3,585	1,298	2,666	4,616	38.4
Government of Peru	5,337	8,092	3,507	1,218	2,585	4,539	37.8
Own resources	75	77	78	80	81	78	0.6
External resources (IDB)	4,233	6,882	2,359	1,160		3,658	30.5
<b>TOTAL EXPENDITURE</b>	13,369	18,780	9,681	6,203	6,418	10,890	100.0
1/ Of which the IDB program:	9,552	14,955	5,848	2,359		8,179	68.1

1/ The IDB program includes direct costs and contingencies and the LTRP Executing Unit.

- 5.7 The projections put aggregate annual expenditures at US\$10.8 million, on average, down from US\$14.7 million during the previous four years. The drop is largely the result of a capital spending plan averaging US\$8.3 million as compared to the historical average of US\$12.4 million. The cadastre and titling component will

account for almost the entire capital spending line item. The government's share of total spending is projected at US\$7.9 million annually, on average, down from US\$11 million in the previous period. These government funds will cover 90% of PETT current expenditures (the 10% balance will be funded from own resources) and 56% of capital costs. The Bank will fund the other 54% of capital expenditures. Capital outlays will peak in 2002 at US\$15.1 million. The maximum in the previous period was US\$17.4 million in 1999.

- 5.8 According to the foregoing numbers, the projected average government contributions and maximum capital outlays are in line with figures in the recent past, so the cadastre and titling component to be executed by PETT is financially viable.

#### **b. SUNARP expenditure projections and funding**

- 5.9 The table below summarizes SUNARP headquarters projections for 2001-2005. Total spending will average about US\$5 million annually (similar to the previous period), split almost evenly between current and capital expenditures. The registration component of the IDB project will take up 70% of the capital spending (down slightly from a 75% share in the 1997-2000 first phase). On average, the government will supply about US\$3.5 million in funding annually, compared to US\$2.1 million in the previous period, covering an average of 83% of current expenditure and 43% of capital outlays. According to conservative estimates, own resources will remain at historical levels of about US\$1.3 million a year, which will defray 27% of recurrent expenditures and 28% of capital costs. The IDB will fund the other 29% of capital expenditure. Capital investment will be highest in 2002, at US\$3.8 million, down from the first-phase peak of US\$5 million in 1999.

**SUNARP financial projections (thousands of 2000 dollars)**

Year	2001	2002	2003	2004	2005	Average	% share
<b>CURRENT EXPENDITURE</b>	2,808	2,808	2,808	2,808	2,808	2,808	51.0
Government of Peru	2,343	2,343	2,343	2,343	2,343	2,343	42.6
Own resources	465	465	465	465	465	465	8.4
<b>CAPITAL EXPENDITURE</b>	2,767	3,761	2,610	1,642	943	2,695	49.0
Local resources	1,825	2,782	1,883	1,184	943	1,919	34.9
Government of Peru	1,147	2,054	1,090	700	33	1,157	21.0
Own resources	678	728	793	849	910	762	13.8
External resources (IDB)	942	979	727	458		777	14.1
<b>TOTAL EXPENDITURE</b>	5,576	6,570	5,418	4,450	3,751	5,153	100.0
2/ Of which the IDB program:	2,036	3,001	1,784	760		1,895	34.4

- 5.10 Since the projected capital-spending maximums are in line with volumes that proved to be manageable in the previous four-year period, SUNARP headquarters

should have no problem executing the planned second-phase investments. The projected government share of aggregate SUNARP spending (averaging US\$3.5 million a year) is slightly above the US\$2.1 million counterpart average during the previous period, which will entail a financial effort on the government's part. The feasibility of this counterpart contribution is part of the larger question of government counterpart requirements for the program overall, which is discussed in the next section.

- 5.11 In considering the financial sustainability of the process, it must be borne in mind that during project execution the government decided to finance the property cadastre and registration because of the externalities involved in regularizing rural properties. Once the property has been entered in the registry, however, the owner must pay the costs of registering the following transactions. Although SUNARP will receive transfers from the government during project execution, its 64 Registry Offices are financially self-sustaining, their operations will have no effect on the program finances. Projections for 2001-2005 were run for these offices simply for information: they show average current expenditures of US\$33.6 million and US\$6.9 million for capital outlays, for a total of US\$40.5 million, on average. The offices' registration fee revenues will defray these costs in their entirety.

**c. Consolidated program cost**

- 5.12 The following table summarizes the program's second-stage consolidated costs. Included along with PETT and SUNARP outlays are PEU costs and planned payments to INRENA.

(thousands of 2000 dollars)

Year	2001	2002	2003	2004	Total	% share
Government of Peru	6,763	10,451	4,624	1,562	23,400	50.1
IDB	6,149	9,320	4,468	3,362	23,300	49.9
TOTAL	12,913	19,771	9,092	4,924	46,700	100.0
Percentage	27.6	42.4	19.5	10.5	100.0	

- 5.13 A comparison of the above figures with the previous four-year period (see paragraph 4.22) reveals that: (i) the US\$23.4 million total counterpart requirement for 2001-2004 is below the demonstrated first-phase counterpart of US\$28.8 million; and (ii) the largest annual counterpart amount projected (US\$10.5 million in 2002) is on a par with the first-phase maximum counterpart capacity of US\$10.3 million. Hence, from a strictly financial standpoint, the overall program is viable.



### **C. Economic viability**

- 5.14 As was discussed in paragraphs 1.22 and 1.23, one serious problem for the first-phase evaluation was the absence of a true baseline, leaving information from secondary sources as the only option. The approach taken was to try to illustrate what effects the titling activities might have had by comparing registered titled parcels and untitled ones. Using that information, an effort was made to demonstrate how the titling and registration process can affect such elements as investment, cropping and stock-raising patterns, productivity, the job market, and the land-market dynamic in Peru's Coast region. The project's main social impacts were examined as well, particularly the gender breakdown of access to property title. All of this information has been used to posit some potential impacts of the second phase (LTRP2). The findings outlined below should be taken as likely impact trends, since the estimates are tentative. The plan for the second-stage evaluation is to construct a baseline to remedy the aforementioned constraints (the main indicators having been chosen during the preparation stage) and to conduct periodic surveys once the project is under way.
- 5.15 Based on the review of LTRP1 it is anticipated that, in the medium to long term, LTRP2 will have positive impacts on investment, productivity, and access to credit for the beneficiary farmers. Other likely outcomes will be a gradual consolidation of rural holdings, a more dynamic land market, and a shift in cropping patterns in the areas targeted for titling and registration. Judging also from the LTRP1 evaluation, employment will probably rise in those zones. When landholders have more secure legal title they are likely to adopt different cropping patterns than farmers in areas with fewer regularized titles. Rice, corn, and potato growing, for instance, would give way to such crops as grapevines and asparagus. As for rural incomes, according to the 1997 National Living Standards Survey, farmers who own their land have higher farm and off-farm, wage and nonwage earnings than households whose land is held under some other form of tenure.

#### **1. Comparative cost of the project: Some considerations**

- 5.16 In a mass-scale cadastre and titling exercise it is important to keep the cost of technical work to a minimum to make the investment cost-effective. Calculations were done of the phase-one direct costs of building the cadastre, formalizing parcel boundaries, and formalizing, registering, and delivering title to individual rural parcels. The operation was found to be low-cost and cost-effective, and also less expensive than other similar projects. When LTRP1 was being prepared it was estimated that adding a rural parcel to the cadastre and registering its title would cost about US\$205 in the "without project" scenario. The ultimate LTRP1 cost of US\$46.61 represents a very substantial reduction. The direct investment in titling for LTRP2 was reckoned on the basis of historical cost (US\$46.7) for new properties to be regularized (225,000) and a weighted average cost (US\$19) for properties in process (525,000). Thus, the direct cost (US\$22.6 million) of the

project titling process was calculated. The rest of the resources to be used for modernizing and strengthening activities will enable the country to continue with the benefits achieved and to regularize the remaining properties in the future.

- 5.17 In the LTRP2 design, cadastral and titling work will continue to be an integrated, systematic process, taking advantage of the economies of scale that a mass-scale approach affords. Sophisticated technologies will be used to build the cadastre and manage cadastral and registry information. The expectation is that the combination of optimized processes and decentralization of technical tasks to PETT regional offices will bring the per-parcel cost down by US\$4-US\$5. The bulk of the saving will be in costs of producing cadastral plans and digital data and their management. Equally important, as far as technical design changes are concerned, is the plan to shorten the time between field visit and title delivery. If the operation is successful, this could be reduced to 65% of the current wait, by about four months. Any further tightening of this timeframe will be difficult because certain intervals in the process are mandated by law (for instance, 30 business days for notice regarding possession of the parcel) and could not be shortened without eroding trust in the process and making it inequitable.

#### **D. Critical issues and risks**

- 5.18 **Rural cadastre and land registry maintenance.** The rural cadastre can only stay current if all future transactions involving parcels of rural land are recorded in it. To help make sure that the cadastre will always be up to date, the project includes a cadastre maintenance strategy. Among the strategy focuses will be creation of a National Cadastre Maintenance Bureau and Regional Cadastre Maintenance Units in PETT, an aggressive information campaign to reshape the country's "registration culture", and institutional and technical changes to lower the transaction costs of registration processes. To tackle this complex task the government would need to create a National Commission with stakeholder agency participation (PETT, SUNARP, COFOPRI, SUNAT, IGN) to come up with a national cadastre strategy. The eventual end-product would be an Integrated Cadastre System. There are provisions for technical assistance during LTRP2 to support this Commission's operation.
- 5.19 **Coordination of work.** The complex cadastre, titling, and registration tasks that will fall to PETT and to SUNARP are very interdependent. Unless the two agencies closely coordinate their planning and human-resources and funding availabilities, this work cannot be done efficiently. To avert problems on this front, the technical and administrative capacity of the Project Executing Unit (PEU) will be strengthened for LTRP2, an information system will be set up to provide planning and monitoring inputs, and the Oversight Committee will be given a stronger role.
- 5.20 **Environmental and social risks.** The process could have some undesirable environmental and social effects: a likely increase in concentration of ownership,

greater use of farm chemicals, more pressure for individual titles on ancestral community lands, probable allocation of vertical complementarity systems to the Sierra, and the possibility of registered parcels overlapping protected areas or culturally important sites. A number of measures and activities, described in chapter III of this proposal, have been built into the project to mitigate or control these potential adverse impacts.

- 5.21 **Institutional and financial sustainability.** By the end of LTRP2 Peru will have finished regularizing close to 60% of its rural land parcels. To complete this task and maintain the facilities and systems set in place, the country needs permanent registry and cadastre agencies with funding for their work. On the land registry side, the SUNARP-headed registration apparatus is relatively sound and registry offices are financially self-sustaining. For the cadastre, the National Cadastre Commission will need to recommend a suitable institutional design for the system and indicate what government funding and own resources will be needed to make cadastral work financially sustainable.

## RURAL LAND TITLING AND REGISTRATION PROGRAM, SECOND PHASE

### COMPONENTS AND OBJECTIVES

PROGRAM	COMPONENTS		
	1. Cadastre and titling of individual rural parcels and community lands	2. Environmental and cultural protection and monitoring	3. Institution-strengthening
Efficient, transparent rural land market.			
Permanent legal certainty of ownership rights to rural parcels and community territories.			
<b>OBJECTIVES</b> Cadastral, titling, and registration of individual rural parcels and communities. Environmental and cultural protection and monitoring. Institution-strengthening.	<b>PURPOSE</b> Deliver title to land that is duly recorded in the cadastre, titled, and recorded in Registry Offices.	<b>PURPOSE</b> Ensure the legal integrity of nature reserves and culturally significant sites in the project areas and keep them intact.	<b>PURPOSE</b> Have in place efficient agencies for rural land cadastres, titling, and registration.
	<b>OUTPUTS</b> <b>Individual rural parcels</b> <ol style="list-style-type: none"> <li>1. Flyover plans executed.</li> <li>2. Ground control and aero-triangulation executed.</li> <li>3. Orthophotos, restitution, digitizing, and editing.</li> <li>4. Parcels demarcated and added to property roll.</li> <li>5. Cadastral certificates issued.</li> <li>6. Legal files prepared.</li> <li>7. Files forwarded to Registry Offices.</li> <li>8. Titles to individual rural parcels registered.</li> <li>9. Registered titles delivered.</li> </ol> <b>Campesino and native communities</b> <ol style="list-style-type: none"> <li>10. Cadastre and titling work done—campesino communities.</li> <li>11. Cadastre and titling work done—native communities.</li> <li>12. Legal framework and procedures devised for individual titling in communities.</li> </ol> <b>Information and training for beneficiaries</b> <ol style="list-style-type: none"> <li>13. Information disseminated on titling activities and training for beneficiaries, including specialized models of gender and sociocultural use of land in campesino communities.</li> <li>14. Information campaign to foster a "registration culture" in the country.</li> </ol>	<b>OUTPUTS</b> <ol style="list-style-type: none"> <li>1. Ecological preserves classified and their boundaries settled and demarcated.</li> <li>2. Protected cultural sites inventoried and their boundaries settled and demarcated.</li> <li>3. Corpus of laws and regulations governing environmental protection, natural-resources conservation, and rural land titling and registration streamlined.</li> <li>4. Economic and socioenvironmental impact monitoring.</li> </ol>	<b>OUTPUTS</b> <b>Strengthening of the Coordinating Agency</b> <ol style="list-style-type: none"> <li>1. Improved PCU administration, and financial management.</li> </ol> <b>Strengthening of PETT</b> <ol style="list-style-type: none"> <li>2. Rural Cadastre Information System developed and operating.</li> <li>3. File Tracking System developed and operating.</li> <li>4. PETT cadastral and titling system optimized, including integration with SUNARP.</li> <li>5. Basic provisions devised for Integrated Cadastre System.</li> <li>6. Management, administrative, and financial management improved at PETT headquarters and regional offices.</li> <li>7. New equipment at PETT headquarters and regional offices.</li> <li>8. Cadastre Maintenance Unit established at PETT regional offices.</li> </ol> <b>Strengthening of SUNARP</b> <ol style="list-style-type: none"> <li>9. Studies produced to strengthen the National Registry System.</li> <li>10. Electronic Registry set up to register titles during LTR process.</li> <li>11. Rural land titling process streamlined, including interface with PETT.</li> <li>12. Personnel trained at regional registry offices.</li> </ol>

**CADASTRE, TITLING, AND REGISTRATION PROGRAM, SECOND PHASE  
LOGICAL FRAMEWORK**

OBJECTIVES	TARGETS	MEANS OF VERIFICATION	KEY ASSUMPTIONS
Efficient, transparent rural land market.	Number of rural land purchase-and-sale transactions increases. Number of transactions secured by registered titles increases.	Ex post evaluation.	
Permanent legal certainty of ownership of individual rural parcels and territories.	<b>Status at the program's end</b> Property titles duly recorded in Registry Offices are delivered to approximately 703,000 rural landowners and 550 campesino and native communities.	Ex post evaluation. Records of program results.	Beneficiaries use titles as security.
<b>GENERAL CADASTRE, TITLING, AND REGISTRATION</b> <b>Individual rural parcels</b> Aerial photography flyovers executed. Ground control and aero-triangulation executed. Orthophotos and vector restitution, digitizing, editing. Parcels demarcated and added to property roll. Cadastral certificates issued. Legal files prepared. Complete files forwarded to Registry Offices. Titles recorded in Registry Offices. Registered titles delivered to beneficiaries.	1) Flyovers of 1,124,000 hectares. 2) 2,641 models prepared. 3) Orthophotos restituted and/or prepared for 531,169 parcels (years 1-4). 4) Boundaries of 250,000 parcels demarcated and parcels added to the property roll (years 1-3). 5) 632,985 cadastral certificates issued (years 1-3). 6) 632,985 files completed for transmittal to Registry Offices (years 1-4). 7) 631,844 files forwarded to Registry Offices for recording (years 1-4). 8) 525,330 titles recorded at Registry Offices (years 1-4). 9) 703,000 titles recorded at Registry Offices delivered to beneficiaries (years 1-4).	PETT records. PETT records. PETT records. PETT records. PETT and SUNARP records. PETT records.	
<b>Campesino and native communities</b> Campesino communities: cadastral surveys done; titled and registered. Native communities: cadastral surveys done; titled and registered. Consultation, legal framework and procedures devised for individual titling in communities completed. <b>Information and training for beneficiaries</b> Titling beneficiaries informed and trained. Information campaign conducted to foster a "registration culture" in the country.	10) Cadastral surveys done of 541 campesino communities (external perimeter) and titles arranged (years 1-4). 11) Cadastral surveys done of 9 native communities (external perimeter) and titles arranged (years 1-4). 12) Regulations issued under Law 26,505 for individual titling within communities (years 1-2). 13) 1 million brochures produced and distributed; 36 TV courses and 36 radio courses (years 1-4). 14) Nationwide campaign conducted (years 1-3).	PETT records PETT records Document produced Opinion poll Opinion poll	

OBJECTIVES	TARGETS	MEANS OF VERIFICATION	KEY ASSUMPTIONS
<b>ENVIRONMENTAL AND CULTURAL PROTECTION AND MONITORING</b> Ecological preserves classified, regularized, boundaries demarcated. Protected culturally significant sites inventoried, regularized, demarcated. Legal framework for environmental and natural-resources protection vis-à-vis rural land titling streamlined. Economic and socioenvironmental impact monitored.	1) 15 nature reserves demarcated (years 1-4). 2) Culturally significant areas demarcated in rural land titling zones (years 2-4). 3) Legal framework for protection of natural resources and cultural sites streamlined (year 1-2). 4) Long-term monitoring done (biannual interviews and a final evaluation) (years 2-4).	INRENA maps and records INC maps and records Document produced Document produced	
<b>INSTITUTION-STRENGTHENING</b> Improvements in PEU management, administration, and financial management. Development and startup of the Rural Cadastre Information System. Development and startup of File Tracking System. Optimization of the PETT cadastre and titling process, including interfaces with SUNARP. Development of provisions for an Integrated Cadastre System. Improvements in management, administration and financial management of PETT headquarters and regional offices. Equipping of PETT headquarters and regional offices. Setup of Cadastre Maintenance Units in PETT regional offices. Produce studies to strengthen the National Registry Office System. Setup of Electronic Registry of registration records (electronic entry). Optimization of the rural land registration process, including interfaces with PETT. Training of regional and local Registry Office staff. Equipping of INRENA's regional and local information network.	1) PEU management methods improve (Planning and Administration) (year 1). 2) Digital Mapping Information System implemented in PETT (year 1). 3) File Tracking System set up in PETT (year 1). 4) PETT technical procedure for cadastral and titling work organized and optimized (year 1). 5) Permanent Cadastre System designed and established (year 1). 6) PETT Planning and Administration System set in place (year 1). 7) Computer hardware purchased and installed at PETT headquarters and regional offices (years 1-2). 8) Cadastre Maintenance Units set up in PETT regional offices (years 1-4). 9) Studies needed to strengthen SUNARP produced (years 1-4). 10) Digitized files set up of registered rural land titles (years 1-4). 11) Cadastral graphic data incorporated into the land registry as agreed with PETT (years 1-4). 12) Registry Office staff trained in technical and computer topics and rules and standards (years 1-4). 13) INRENA regional offices strengthened (new hardware, other elements) (years 1-2).	Inspection Inspection Inspection Inspection Inspection Inspection Procurement records/Inspection Inspection Documents produced Electronic entries added Inspection Reports and observation visits Inspection	
<b>FINANCIAL RESOURCES</b>	<b>BUDGET (US\$)</b>  Component 1 22,558,280 Component 2 1,711,200 Component 3 12,597,755 Total cost all components 36,867,235	Budget performance reports	Resources are available and when needed

OBJETIVES	TARGETS OF OBJECTIVES	MEANS OF VERIFICATION	KEY ASSUMPTIONS
efficient, transparent rural land market.	<ul style="list-style-type: none"> <li>- Increase in the number of land purchase-and-sale transactions.</li> <li>- Increase in transactions secured with rural land titles.</li> </ul>		
Permanent legal certainty of ownership rights to parcels of rural land and Communities.	<b>STATUS AT THE PROGRAM'S END</b> <ul style="list-style-type: none"> <li>- 703,000 owners of individual rural parcels and 550 campesino and native communities receive settled title to formally demarcated parcels, recorded in Registry Offices, that guarantee their owners legal ownership of their land.</li> </ul>	Evaluation of project outputs.	Beneficiaries use title to transfer status to transfer money, etc.).
<b>OBJECTIVES</b> Land titling, and registration of individual rural parcels and campesino and native community territories.	<ol style="list-style-type: none"> <li>1. The core objective of this component is to deliver title to individual rural parcels and community land with formally demarcated boundaries and legal title, recorded in Registry Offices, thereby according landholders secure legal ownership of their land. The plan is to:             <ol style="list-style-type: none"> <li>a. Complete the boundary formalization, legal regularization, registration, and delivery of 525,000 titles to individual rural parcels which, at the end of phase one of the program, were at various stages of processing and formalization.</li> <li>b. Formalization of boundaries and legal regularization of 250,000 new individual parcels and registration and delivery of 178,000 titles.</li> <li>c. Boundary formalization and legal regularization, registration, and delivery of 541 titles of campesino communities and 9 of native communities. Broad consultation with communities, regulations enabling Law 26,505, titling procedures, and a pilot individual-titling trial on approximately 300 properties.</li> </ol> <p>All this work will be done through a cadastral surveying and land titling "sweep" using multidisciplinary work teams trained in technical and legal facets of the process, using modern cadastral and titling methods, and expeditious Registry Office recording procedures. The component will be executed over four years.</p> </li> <li>2. The object of this component is to assure the legal integrity of nature preserves and culturally significant sites in the program's areas of influence and keep them intact. To that end, it will classify, regularize, and demarcate ecological preserves; inventory, regularize title and demarcate protected cultural zones; streamline the legal framework for natural-resources conservation and environmental protection, and monitor the program's economic and socioenvironmental impact (years 1-4).</li> <li>3. This component's objective is to have executing agencies and systems well equipped for the tasks of cadastral work, titling, and registration of rural land, cadastre maintenance, and economic and socioenvironmental impact monitoring. To this end, the component will strengthen the management, technical, administrative, and financial management capacity of the PEU and of PETT and SUNARP headquarters and regional offices, bringing in modern systems and methods for information, rural cadastre work, titling, and registry recording, and monitoring the program's economic and socioenvironmental impact (years 1-2).</li> </ol>	<ol style="list-style-type: none"> <li>1. Land titles recorded in the cadastre, formalized, and recorded at Registry Offices.</li> <li>2. Inventories, plans showing demarcated nature reserves, ecological preserves, and culturally significant sites.</li> <li>3. Evaluation and inspection of improvements.</li> </ol>	The titles are recorded in valid, legal process of ownership.
Environmental and cultural protection and monitoring.			
Capacity-strengthening.			

OBJETIVES	TARGETS OF OBJECTIVES		MEANS OF VERIFICATION	KEY ASSUM
S	BUDGET (US\$)			
photography flyovers.	Component 1	22,558,280	Budget-performance evaluation report	1-5 Resources as and when
o-triangulation.	Component 2	1,711,200		
photography (new parcels).	Component 3	12,597,755		2. Climate cond
arcation of parcels, addition to property roll.				allow the wor
ogrammetric restitution.	Coordinating unit	2,832,600		done.
itizing.	PETT coordination	256,000		
ing.	SUNARP coordination	511,200		
he cadastral certificates.	INRENA coordination	219,300		
complete legal files.	Audit and evaluation	180,000		
ward completed files to Registry Offices.	Contingencies (4%)	1,634,653		
orm and train beneficiaries.	Total	42,500,988		
iver registered titles to beneficiaries.				
ordinate work of PETT, INRENA and INC.				
marcate ecological and nature preserves and				
urally significant sites.				
iver completed work to PETT.				
onitor environmental and cultural protection in				
ect areas of influence.				
are final strengthening timetable.				
ecute final strengthening timetable.				
tract for/Purchase goods and services.				
ervise strengthening activities.				
valuate strengthening outcomes.				
ke improvements and adjustments.				



**LAND TITLING AND REGISTRATION PROJECT, SECOND PHASE  
CONTRACTING AND PROCUREMENT PLAN**

<b>Description Number of lots / Total / Amount</b>	<b>Method</b>	<b>Prequalification</b>	<b>Public (Year)</b>
<b>TITLING SERVICES</b>			
<b>REGISTRATION AND SUPERVISION (Program Coordinating Unit—PCU )</b>			
Develop and implement the File Tracking System s: 1 Amount: US\$300,000	ICB	Yes	Yes
Consultant services to improve PEU management, administration, and financial management s: 1 Amount: US\$80,000	LCP	No	Yes
<b>RURAL LAND CADASTRE, TITLING, AND REGISTRATION</b>			
Photography firms s: 1 Amount: US\$261,000	LCB	Yes	Yes
Aerial triangulation of aerial photographs, orthophotos at scale 1:15,000, purchase of specialized equipment and software and training in PETT s: 1 Amount: US\$2,148,075	ICB	Yes	Yes
Create and run an information campaign to explain the titling process and rural property rights s: 1 Amount: US\$566,000	ICB	Yes	Yes
Consultant services for a legal diagnostic assessment and to develop operating, technical, and administrative procedures for titling in campesino communities s: 2 Amount: US\$300,000	LCP	No	Yes
<b>STRENGTHENING THE RURAL LAND CADASTRE AND REGISTRY SYSTEM</b>			
Develop and implement the Georeferenced Rural Cadastre Information System and migrate existing data s: 1 Amount: US\$2,679,600	ICB	Yes	Yes
Optimize the PETT cadastral and titling process and devise provisions for a national cadastre management agency s: 1 Amount: US\$200,000	LCB	Yes	Yes
Improve PETT management, administration, and financial management s: 1 Amount: US\$200,000	LCB	Yes	Yes
Trained services to train PETT personnel s: Several Amount: US\$355,800	LCB	No	Throughout
Consultant services to devise rural cadastre maintenance mechanisms, an implementation plan for the system and evaluation of testing s: 2 Amount: US\$63,605	LCP	No	Yes

Description Number of lots / Total / Amount	Method	Prequalification	Public (Yes/No)
Individual services of individual experts for PETT rural cadastre maintenance Lots: Multiple Amount: US\$1,529,881	LCP	No	Through
Develop and start up an Electronic Registry in SUNARP regional and local offices Lots: 1 Amount: US\$1,000,000	ICB	Yes	Y
Individual consultants to produce studies on strengthening the SUNARP National Registry Office Lots: Several Amount US\$250,000	LCP	No	Yes
Individual services to optimize the registration process and its interface with the rural cadastre Lots: Several Amount: US\$350,000	LCB	No	Through
Individual services to train Registry Office (SUNARP) staff Lots: Several Amount: US\$400,000	LCB	No	Through
<b>ENVIRONMENTAL AND CULTURAL ANALYSIS, PROTECTION, AND MONITORING</b>			
Develop and implement a system to monitor economic and socioenvironmental impacts of titling Lots: 1 Amount: US\$265,000	ICB	Yes	Y
Individual consultant services for a legal analysis of titling and environmental protection Lots: 2 Amount: US\$66,500	LCP	No	Yes
Individual consultant services to devise operating procedures for protection of reserves and preserves Lots: 1 Amount: US\$20,000	LCP	No	Y
<b>ACQUISITION – Goods</b>			
Hardware and software and specialized cadastral surveying and mapping apparatus for PETT Lots: Several Amount: US\$5,065,180	ICB	Yes	Year
Hardware for regional Registry Offices and SUNARP Lots: 1 Amount: US\$440,000	ICB	Yes	Y
Aerial photography and satellite imaging to bolster INRENA's geographic information system Lots: 2 Amount: US\$23,000	LCB	Yes	Y
Vehicles for PETT regional offices Lots: 1 Amount: US\$706,000	ICB	Yes	Y
Open competitive bidding Open competitive bidding Call for proposals g			

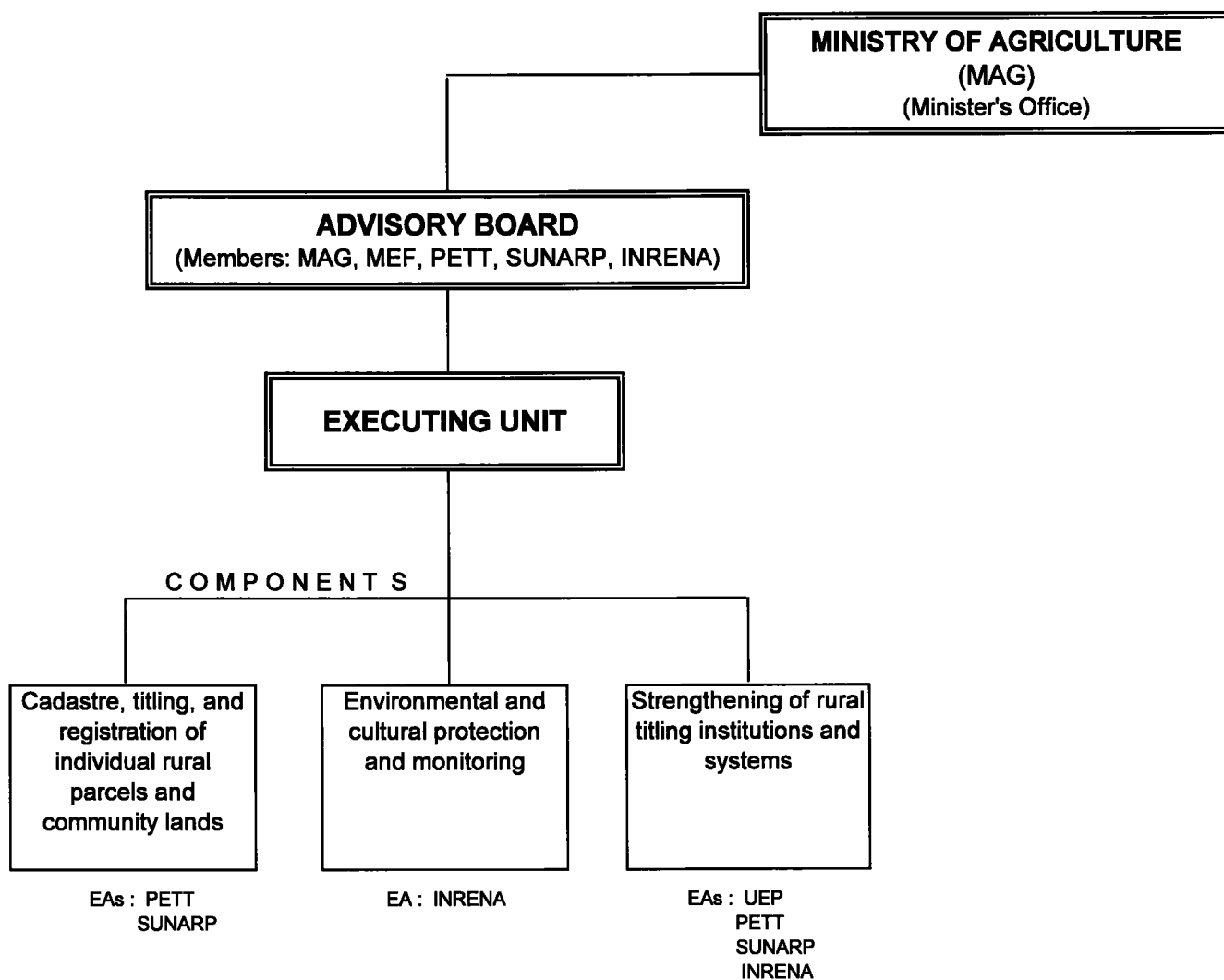
**FIGURE 1**

PERU (PE-0107)

**ANNEX III**

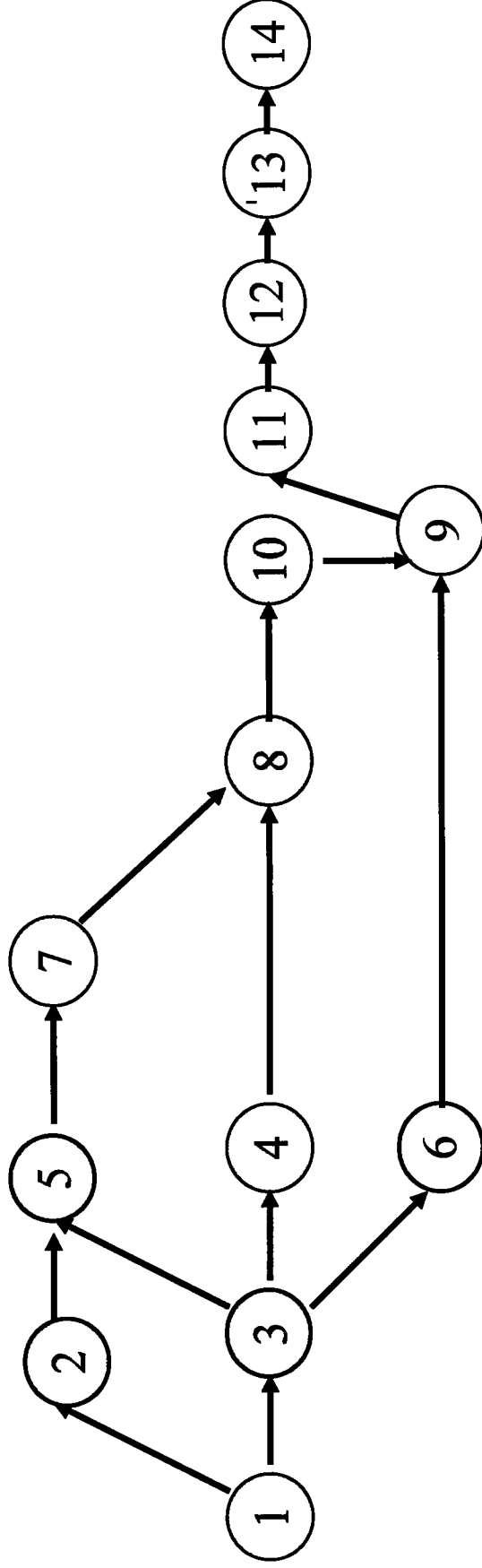
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**ORGANIZATION OF THE LAND TITLING AND REGISTRATION PROGRAM, SECOND PHASE**



EA : Executing agency of the component.

# SEQUENCE OF ACTIVITIES



○ Boundary formalization      ○ Formalization of legal title and recording in Registry Offices

TWO PARALLEL PROCESSES ARE FOLLOWED FOR THE FORMALIZATION OF BOUNDARIES AND SETTLEMENT AND DELIVERY OF LEGAL TITLE TO PARCELS OF RURAL LAND: THE CADASTRAL SURVEY AND RECORDING PROCESS AND ASSEMBLY OF THE LEGAL FILE, FOLLOWING THE STEPS ENUMERATED BELOW:

- |  |   |
|--|---|
| 1. AERIAL PHOTOGRAPHY FLYOVER                                  | 8. GRAPHIC-TEXTUAL DATA LINK                                |
| 2. GROUND CONTROL AND TRIANGULATION                            | 9. PRELIMINARY LEGAL DETERMINATION ON THE FILE              |
| 3. DEMARCATION AND ADDITION OF THE PARCEL TO THE PROPERTY ROLL | 10. CADASTRAL CERTIFICATE                                   |
| 4. CADASTRE FORM   | 11. FILE CLEARED FOR REGISTRATION                           |
| 5. PHOTOGRAMMETRIC RESTITUTION                                 | 12. DELIVERY OF REGISTRATION APPLICATION TO REGISTRY OFFICE |
| 6. LEGAL FILE  | 13. RECORDING IN REGISTRY                                   |
| 7. DIGITIZING, EDITING   | 14. DELIVERY OF TITLE TO BENEFICIARY                        |

**LAND TITLING AND REGISTRATION PROJECT, SECOND PHASE**  
**STRUCTURE OF PROCESS COSTS**

**Average unit (per-parcel) costs for each technical step**

<b>Technical activity</b>	<b>Cost (US\$)</b>
Flyovers, ground control, aero-triangulation	1.80
Demarcation of parcel boundaries; recording of cadastral forms on property roll	10.50
Boundary restitution	7.80
Production of digital cadastral maps and geographic information system database	1.40
Legal regularization, file preparation and "pre-registration"	11.45
Verification and recording of titles in registry office	4.00
Delivery of titles (certificates) to beneficiaries	1.95
Process management (field and deskwork)	7.71
<b>Total</b>	<b>46.61</b>

**PROPOSED RESOLUTION**

**PERU. LOAN \_\_\_\_/OC-PE TO THE REPUBLIC OF PERU**

**(Land Titling and Registration Program--  
Second Phase)**

**The Board of Executive Directors**

**RESOLVES:**

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Peru, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the Land Titling and Registration Program-- Second Phase. Such financing will be for the amount of up to twenty-three million three hundred thousand dollars of the United States of America (US\$23,300,000), from the Single Currency Facility of the Ordinary Capital resources of the Bank, and will be subject to the "Financial Terms Conditions" and the "Special Contractual Conditions" indicated in the Executive Summary of the Loan Proposal contained in Document PR-\_\_\_\_\_.