Peru: Educational Reform

Present
Educational Conditions
and Statistical Data

Volume II

This Report is both confidential and the copyright of Unesco. Reproduction in whole or part. is prohibited.

Unesco



PRESENT EDUCATIONAL CONDITIONS

General Education (see Annexes II.18-II.25, II.40, II.48)

- 1. The present school system is based on a pattern of six years of primary education followed by five years of secondary. Higher educational levels are covered by teacher training colleges, technical intermediate colleges and universities.
- 2. Secondary education is characterized by a basic cycle of three years followed by a specialized cycle of two years. In general secondary schools this upper specialized cycle is sub-divided into two streams one for scientific studies, the other for humanities. In the case of technical secondary schools, however, at present there is no clear distinction between the basic cycle and the upper cycle, as technical courses run through starting from the first year of secondary education. Technical secondary schools themselves are divided into four types industrial, boys and girls, agricultural and commercial.
- 5. Enrolments at all levels of the formal educational system have increased considerably, for example, primary school enrolments have risen from 1,579,000 in 1963 to 2,475,000 in 1970, secondary from 220,000 to 527,000 and university from 46,032 to 105,612 during a similar period.
- 4. This expansion of the educational system has been coupled with a lowering of efficiency, in primary schools for example the apparent retention rate has dropped from 39.1 per cent to 38.2 per cent and in general secondary schools from 66.7 per cent to 56.0 per cent during the past two years. Expansion has also favoured general secondary education against technical secondary, the percentage of pupils in technical studies dropping from 19 per cent of the total secondary enrolment in 1963 to 14.5 per cent in 1970.
- 5. In general terms the current educational system shows two characteristics, one being the large proportion of over-aged mupils especially at the primary level, and the second a certain discrimination against rural areas. In this latter respect, in 1970 only 63 general secondary and 44 technical secondary schools were situated in rural areas compared to the 1,388 urban general secondary and 370 technical secondary schools: yet the percentage of population dwelling in rural areas constitutes approximately 48 per cent of the total population. At the primary level also, it is estimated that 61 per cent of rural primary schools do not offer the full cycle of primary education.
- 6. The teaching force in general education contains a relatively high proportion of untrained teachers, with 39 per cent of primary teachers, 30 per cent of general secondary teachers and 15 per cent of teacher

trainers at present being unqualified. This means that under current conditions a primary school pupil stands the chance of spending 22 years out of the total six year course studying under an unqualified teacher.

- 7. Current pupil:teacher ratios (1970 School Census) are 42:1 at primary (day and evening), 30:1 for general secondary (day and evening) and 18:1 for teacher training.
- 8. About 26 per cent of pre-primary and primary school buildings are considered as being substandard and require either replacement or considerable maintenance. In rural areas the situation is more extreme and the percentage of substandard schools may reach 70 per cent. At the secondary level a large number of schools still lack adequately equipped laboratories and libraries.

Teacher Training (see Annexes II.41-II.47, II.53)

- 9. Teacher training is offered at the higher education level by teacher training colleges and by the faculties of education of the universities, in four and five year courses respectively, for both primary and secondary education. A comparison of these institutions shows that while the enrolment in universities is higher, the output of teachers has almost always, in relative as well as absolute figures, been much lower.
- 10. Distributions of enrolments in university faculties of education and in teacher training colleges show a clear tendency for students to elect to become secondary school teachers. At teacher training colleges the preferred areas of study are science and mathematics.
- 11. Teacher training colleges tend to be small and uneconcuic, 61 per cent have inadequate physical facilities while 59 per cent lack adequate equipment. Since 1968 a programme to consolidate and rationalise the system has been in effect; it is planned that this programme will be completed by the end of 1972.

<u>Universities</u> (see Annexes II.31-II.36)

12. In the past ten years the number of universities as well as their enrolment increased about three times with the establishment of 23 new universities, at an average annual rate of about two per year except for 1961 and 1962. Fourteen of the existing 33 universities in 1969, covering 61 per cent of the total enrolment were located in the metropolitan area of Lima-Callao. Regarding the size of the universities, only six (of which four in Lima) had over 5,000 students (four of them around 5-6,000, one about 11,000 and one 21,000), 13 had between 1,000 and 5,000 students

- and 13 less than 1,000 (five even less than 500). There were 12 private universities (four in the interior) and their enrolment made up about 23 per cent of the total.
- 13. Available data show that the private participation in the evolution of the universities has continuously increased in general and in each study area. The ranking order of these areas in terms of enrolment has remained almost the same during the decade (humanities, education, engineering and architecture, medicine, sciences). However, the percentage participation of the students has decreased in medicine and sciences in favour exclusively of education.
- 14. The solution of the qualitative problems illustrated by the above data is the main objective of the university reform as expressed in the University Organic Law, the General Report on the Reform and the draft Educational Law, and will be obtained through consolidation, definition and control of standards, national planning and coordination.

Agricultural Education (see Annexes II.27-II.30, II.35, II.52, II.54)

- 15. Except at university level, agricultural education is under the responsibility of the Minister of Education.
- 16. Primary level: Elementary agricultural education is provided in "pre-vocational" schools ("Escuelas Pre-Vocacionales") and farmer education nuclei ("Múcleos Escolares Campesinos"). The first are primary schools in rural areas, giving agricultural tuition during the last two years. The second are groups of rural schools which are involved in extra-school activities for school leavers and adults, and deal with community development.
- 17. Secondary level: Agricultural vocational education, with a strong general education component, is given in 95 secondary schools ("Institutos Nacionales Agropecuarios") and 21 agricultural technical centres ("Centres de Capacitación Técnica Agropecuaria"). Furthermore, four post-secondary vocational schools have at the same time a secondary course. The curriculum of these schools, spread over five years, is divided into about 56 per cent of general courses and 44 per cent of professional ones. The director of the institute has the right to adapt the courses towards the zonal agricultural characteristics. The distribution by departments, enrolments, evolution in the period 1963-70, percentage distribution of the pupils and the student:teacher ratios are shown in Annexes II.27-II.30.

 After five years, students passing the final examination are granted a title of agricultural technician ("técnicos agropecuarios"). Almost all institutions are provided with boarding facilities which are generally not utilized

because of a lack of funds to cover running expenses. The Government finances the majority of the scholarships, the rest being granted by other institutions. Only 45 per cent of graduates remain in agriculture, the rest continue their studies or change professions.

- 18. Only a small percentage of the institutions did not own or at least rent land for a farm.
- 19. Post-secondary level: The existing seven post-secondary agricultural schools are young institutions; one started in 1965, one in 1967, three in 1968 and two in 1970. Their purpose is to train high-level agricultural technicians in different specializations such as extension, home economics, animal husbandry, horticulture and the management of cooperatives. The curriculum, not definitely decided yet, is supposed to be flexible and adaptable to regional differences. At the end of each year there is a practice period of about two months.
- 20. Conditions concerning boarding facilities are the same as for secondary institutions. Post-secondary schools have farm and agricultural equipment, though not always complete. Students receive a full scholarship only in the case of good performances. On the basis of a diploma and success in the final examination they are granted the title of "perito agricola".
- 21. University level: Two universities and twenty faculties prepare professionals in the fields of agriculture, animal husbandry, veterinary science and forestry. The total enrolments for 1968 were 4,908 and the output for 1969 was 433. Many faculties created during the last years have not yet reached the stage of full utilization of their capacity. The "Escuela de Graduados" of the agrarian university of La Molina offers also the degree of "Magister Scientiae".
- 22. The principal universities carry out research programmes, with the help of decentralized institutes or stations. The university of Ia Molina has a large farm for research and teaching purposes. In 1965, the same university had estimated the annual unit cost per student at 2,204 Soles (US \$82.18 1965 exchange rate).
- 23. Farmer courses: In addition to the extension work of the Ministry of Agriculture, many other governmental bodies are involved in rural adult training activities:
- a) the Ministry of Labour through the National Plan for the Integration of the Native Population ("Plan Nacional de Integración de la Población Aborigen):

- b) the Ministry of War, through literacy courses given in agricultural training centres;
- c) the Ministry of Public Works ("Ministerio de Fomento") through communal development activities;
- d) the agricultural secondary schools, which organize training courses;
 - e) the ONDECOOP, dealing with the cooperative movement;
- f) the CENCIRA, which also organizes courses for cooperative leaders:
- g) some universities, which are responsible for labourers' training courses.
- 24. In addition, many youth clubs (such as the "Juventud Rural Masculina", "Juventud Rural Femenina", "Clubes de Amas de Case", "Clubes Agricolas Juveniles Perú", etc.) develop traditional agricultural and rural activities.

Fishery Training Institutions

- 25. Before Peru recently became the world's leading fishing nation, fisheries activities were marginal to the general economic development of Peru, involving few small-size inshore vessels (most of them unpowered) and less than I per cent of the country's total active labour force. As a consequence, medium level technicians (skippers, engineers and fishmeal industry skilled workers) have been trained according to the particular needs of each fishing enterprise, through private initiative, SENATI and the General Directorate of Port Captains and Coast Guards. Higher level staff of the fish-meal industry have been drawn from the universities, from the chemical engineering schools in the early days of the industry and more recently from the fishery faculties of the universities.
- Private enterprises: The main training effort has been made by the largest fish-meal industry group, Banchero. In 1965 it started emergency courses for skippers and engineers for 180 tons boats with the collaboration of the Peruvian Navy and commercial firms supplying engines. Courses were held at Callao and Chimbote, duration was 5 to 7 weeks during the close fishing season; subjects included basic knowledge, ship design, fishery biology, engines, auxiliary fishing equipment, electricity and radio, navigation, accident prevention and survival at sea, masts, spars and net

Bergherer Handlich auf ein Bergel auch einem seine Heine werden eine eine eine der eine der der eine der eine

handling. A total of 110 people were trained during the 1965, 1966 and 1967 courses. At present the Banchero group has an excellent training centre in Chimbote with room for 75 pupils and plans to give regular training courses during the whole year.

- General Directorate of Port Captains and Coast Guards, Ministry of Marine: The General Directorate runs training courses for skippers in the following major ports: Chicama, Chimbote, Samana, Casma, Culebras, Huamey, Juacho, Chancay, Callao, Puenama, Tambo de Mora, Pisco, Mollendo and Ilo. About 2,500 practical fishery skipper certificates have been granted so far. Courses covered traffic regulations, survival at sea, navigation, stability, boat design and communication. Courses leading to the second class skipper certificate are being given at Callao, Chimbote and Ilo during the close fishing season. Duration of the courses is 420 hours. About 130 second class skipper certificates have been granted so far. Courses to obtain first class skipper certificates are planned for 1972 and 1973.
- 28. SENATI: The SENATI has offered some training for the running and maintenance of boat engines at the request of fish-meal industrialists according to their specific needs, but these services have not been extended to the fishing sector as a whole where the rule has been on-the-job training. SENATI however is technically ready to adapt and expand its training services to the whole fishery sector and to meet temporary requirements in a relatively short period. The only problem is to find a suitable administrative mechanism permitting individual fishermen to be affiliated to SENATI. This could be achieved either through the Federation of Fishermen or through fishermen cooperatives.
- 29. Formal public schooling: At primary and secondary level, no institution offers fisheries subjects. The Fishery Technical School, attached to the Faculty of Hydrobiological and Fishery Resources, (National Technical University of Callao) has offered training of technicians at secondary school level through occasional courses from 1964 to 1967. Out of about 30 graduates from the school, only seven are said to have entered the fishery sector.
- 30. At the university level, five universities have five year academic programmes leading to the fishery engineer diploma. The total number of students enrolled from 1960 to 1968 and the nature of programmes and diplomas are shown in Annex II.36. A common feature of all the curricula is a general academic orientation with emphasis on the industrial utilization of fish. Graduates who have found employment in the fishery sector work exclusively in the processing sector (fish-meal) and not in the fish catching sector.

31. The average yearly output of graduates from all universities is 70 to 80. The present total number of highly qualified people employed at the managerial or technical level for the whole of the Peruvian fishery industry (canning, freezing and fish-meal) is estimated at about 1,000. At a replacement rate of 3.5 per cent, including retirements and withdrawals, no more than 35 graduates would be required yearly.

Vocational Training, Industrial, Commercial, Intermediate and Engineering Education (see Annexes II.26-II.34, II.49-II.51)

- Workers for industry, crafts or clerical jobs is undertaken by semi-autonomous organizations such as the SENATI, by the Ministries of Education, Labour, Industry and Commorce, Health, Energy and Mines, Agriculture, and by 190 private "academias". Several related programmes are also offered at various levels, by the Ministry of National Defence, the Ministry of External Relations and the Ministry of the Interior.
- The Ministry of Education organizes non-formal vocational courses for men at the secondary industrial institutes and polytechnics, or in schools dedicated exclusively to the qualification of skilled or semi-skilled workers ("Capacitación"). The duration of the courses (day and night) is from three months to three years depending on the speciality. Conditions of entrance are to have completed <u>primary education</u>, to possess a worker's certificate and to be at least 16 years old.
- 34. The Ministry of Education also runs about 121 workshop or pilot centres (1971 data) for craftsmen ("artesanal"). There were 23,469 students in 1970 and the only condition for entrance is to be over 14 years of age. The specialities taught are grouped into two types: short courses and courses of specialization. The first type lasts one year and the second, two or three years.
- 35. The non-formal vocational training for women ("Capacitación Industrial Femenina") is offered in sections annexed to the industrial institutes for women which give short, qualifying (evening, three years) courses ("cursos de competencia") to young or adult women who cannot attend regular courses. Many of the hundred and ninety private "academias" in Peru prepare students for skilled or semi-skilled vocational jobs.
- Industrial Education for Men: The courses last five years after primary education and are supposed to prepare students to occupy posts at technician level in industry, after acquiring the necessary experience. They are called "Institutos Nacionales Industriales" or "Politécnicos". The specialities covered at present are petrol engines, diesel engines, general mechanics, agricultural mechanics, electro-mechanics, electricity, radio, television, carpentry, ship's carpentry, building construction,

mining, metallurgy, graphic arts, fisheries, tannery and leatherwork, technical drawing and tailoring.

- J7. Industrial Education for Women: The duration of studies is five years after primary. Specialities covered are the following: embroidery, cosmetics, weaving, cutting and dress-making, laboratory assistant, binding, toy-making, ceramics, photography, jewelry, cooking and confectionary, leatherwork, decorative arts and assistants in social welfare.
- 38. There are also ten private technical secondary schools for girls.
- 39. <u>Commercial Education</u>: Secondary commercial schools are either one sex or co-sducational and specialize in commerce, accounting and secretarial work.
- 40. Thirty-five private schools also give secondary commercial courses.
- 41. <u>Intermediate Schools</u>: After graduating from the technical secondary schools and occasionally from academic secondary schools, students may attend (for two to three years) the "intermediate schools" in order to acquire further knowledge in a specific field.
- 42. For men who wish to specialise more in construction and architecture, cabinet-work and decoration, electricity, electronic power plants and fishery, the "Instituto Technológico Nacional José Pardo" and the "Escuela Técnica de Electrónica", both in Lima, the "Escuela Técnica de Pesquería" in Callao and the Regional Colleges in Tarma, Tacna and Chimbote and the "Instituto Técnico Superior" of Andahuaylas.
- 43. The "Instituto Nacional de Decoración de Interiores" in Lima and the "Instituto Nacional de Commetología, also in Lima, give three year courses to women graduates from technical secondary schools.
- 44. Post-secondary courses in business administration are given in Lima at the "Instituto Técnico de Administración República Argentina" and at the "Instituto Macional de Comercio No. 16 Melitón Carvajal".
- 45. Seventeen private schools also give courses at the intermediate level.
- 46. Engineering Education: There are 15 State universities and 3 private universities giving courses in engineering and/or architecture having a combined enrolment (1968) of 9,693 students.

- 47. Some universities give short technical courses leading to the title of upper-level technician, technologist or engineering technician. The most notable is the School of Technology giving four-year courses in mechanical production, heat engines, chemical, electrical, electronics and textile engineering. The courses are alternated with long apprenticeships (six months duration) in industry and the public sector.
- 48. Technical Teacher Training: Peru had in 1970 a total of 6,333 public and private technical teachers for technical (men and women), commercial and agricultural secondary education for the training of artisans and skilled and semi-skilled workers ("Competencia"). Taking into consideration the fact that 145,500 students were studying technical subjects, this gives a student: teacher ratio of 22:1.
- 49. Six teacher training colleges, four universities and the fourteen higher institutes for technical education (intermediate schools) prepare technical teachers for secondary technical schools and for vocational training. Intermediate schools professors are university graduates (National University of Engineering).

Adult Education (see Annex II.38)

50. Courses are available for adults on an evening-class basis both at the secondary and primary levels. These courses show no special adaptations, they follow the standard patterns of both primary and secondary education but are extended in time by one year over day classes. Literacy classes are organized but their importance has declined rapidly since 1963 with enrolment dropping from over 377,000 to less than 34,000 in 1968. This drop in enrolments however makes an interesting contrast with the rapid increase in artisanal training (see section on technical education) which rose in enrolments from just over 1,000 in 1963 to an estimated 23,500 in 1970. Adult education and training activities in agriculture and industries are important and have been covered in preceding sections.

Educational Radio and Television

51. A relatively large number of mainly radio, but also television education programmes are operated in Peru, most of them under private initiative, with very limited resources, and almost always with the voluntary time contribution of the public or commercial television or radio enterprises.

Annex II.55 presents a summary of the existing programmes in the various towns of the country.

52. The recently established 'Instituto Nacional de Teleducación' (INTE) by Presidential Decree No. 02-71/Ed. of June 1971 is intended to reinforce, coordinate, plan and expand the use of radio and television for educational purposes (in-school and out-of-school) all over the country. A more recent law increasing the participation of the State in all privately owned radio and television enterprises will secure for INTE the technical means to implement the programmed operations all over the country.

Educational Financing (see Annexes II.56-II.57)

Recent years have been marked by an increasing participation of 53. the public sector in development, accompanied by special emphasis on social services. This resulted in considerable changes in the size and structure of public finance. - Information presented in Annex II.16 summarizes the changes in Central Government operations 1965-1970. During this period the Central Government current revenues and expenditures doubled, representing an annual rate of increase of 18 per cent and 15 per cent respectively (based on current Soles). One of the major reasons for this fast growth of current expenditure was rapidly growing allocations in social services and particularly in education; development expenditure was also increasing at a rate of 10 per cent per annum during this period. The overall deficit, amounting to an average of some 4 billion Soles per annum was regularly financed from such sources as domestic and foreign borrowing, debt relief, etc. In the last three years the financial position of the Government substantially improved. though the 1970 budget incurred a deficit. The Peruvian Government has accepted the idea of deficit financing. This means that the classical principle "State expenditure should be kept to the minimum necessary to cover certain essential requirements and that revenue and expenditure should be balanced each year" is now being disregarded. The World Bank report estimates that the

^{1/} Mis subject is studied in depth in the IERD/IDA Report Economic Growth of Feru, Problems and Prospects and Peru: Recent Economic Developments, March 31, 1971.

^{2/} Cited by the 1970 Annual Meeting of the IERD/IDA Board of Governors.

Summary Proceedings, page 151. This concept has been confirmed by the Minister of Finance and Economy in the recent speech of 8 September 1971.

State revenues will, under certain conditions, be able to increase at a rate of 5.8 per cent per annum, reaching the level of 47.7 billion Soles in 1975.

- The educational financing patterns applied in Peru do not land 54. themselves to detailed financial analysis; complicating factors are: existence of public and private educational establishments, the prevalence of part-time teachers, frequent changes and incompleteness of accounting systems and frequent transfers within the educational sector. Public educational expenditures have grown from some 6.6 billion Soles in 1968 to 9.3 billion in 1970, from the 9.3 billion spent on education from public sources, 7.8 billion (80 per cent) were provided by the Central Government, amounting to 25 per cent of its available resources in 1970, the rest is provided by supplementary sources such as "organismos descentralizades", i.e. mainly universities, contributions from local authorities and donations. The share of private educational institutions in total educational outlay is not known, but judging from the financial constraints normally experienced by private institutions, this share would probably not exceed some 7-10 per cent of public funds.
- 55. It is safe to assume that total educational outlay in Peru reached the level of 4.5 4.7 per cent of the GDP in 1970, compared with 3.1 per cent in 1960. The proportion of both the national budget and the GDP used for education are high and this means that in future years the possibility of further increases in the proportions of the budgets or the GDP devoted to education will be limited.
- 56. The table below shows the distribution of the 1970 public allocations among various levels and types of education.

TABLE 1 (In Million Soles)

Level and Type of Education	In Soles	In F
Ministry of Education	7.788	<u>83.5</u>
1. Central and Local Administration 2. Primary and Pre-primary 3. Secondary General Education 4. Secondary Technical Education 5. Adult Education 6. Cultural and Special Education 7. Construction and Equipment 8. Transfers (excluding universities)	339 3,725 61 1,353 542 299 279 1,193	3.6 40.0 0.7 14.5 5.8 3.1 3.0 12.8

Level and Type of Education	In Soles	In %
Decentralized bodies	1,543	16.5
1. Universities 2. "Comite Nacional de Deportes"	1,477 66	15.8 0.7
Total	9,331	100.0

Source: Estimated on the basis of "Flan Bienal 1971-72, Documento de Trabajo"

- 57. The major executing agency for the educational budget is the Ministry of Education. Recent statistics reveal that only some 3-5 per cent of public allocations for education are used for capital purposes, implying a reduction from the 7-10 per cent reported in previous years; this tends to illustrate pressure from the recurrent budget. Official statistics show that current expenditure has always been higher than the budgetary appropriations with the deficit being subsequently covered by investment appropriations; it is also reported that the capital budget is frequently used for servicing debts.
- 58. Regarding the pattern of distribution of recurrent expenditure among levels of education, it appears that the share of primary education has, in recent years, increased considerably to 40 per cent, compared with 24 per cent in 1968. The shares of secondary general and technical education have remained practically unchanged. The second largest item of the current expenditure was outlay for State universities.
- 59. The allocation of the 1970 educational budgets reveals the absolute predominance of the salaries and emoluments component.

TABLE 2
REMUNERATION AS A PERCENTAGE OF PUBLIC ALLOCATIONS FOR EDUCATION

Primary	96.7
General Secondary	92.5
Technical	93.0
Universities	65.0
Total	83.0

The share of allocations spent on teaching materials, maintenance and supply is low. The most outstanding fact is that in technical secondary schools, 95 per cent is absorbed by salaries and other emoluments.

- 60. Fees are not charged in primary and secondary schools, except for repeaters, who have to pay some 300 Soles every three months. At universities monthly fees are charged, ranging from 600 to 2,000 Soles, depending on parental income. Various apprenticeship schemes responsible for skilled worker training are financed by enterprises through a compulsory contribution of 1 per cent of their remuneration bills when more than 15 workers are employed.
- 61. An appraisal of teachers' working conditions presents numerous difficulties. On the one hand, there is the fact that the annual salary of an unqualified primary teacher is four times higher than average national per capita income (\$1,420 and \$360 respectively). On the other, one has to take into account that families in Peru are normally large, with some 5-6 children and the teaching profession does not permit participation in highly paid supplementary activities to support the family budget. Furthermore, the salaries of secondary school teachers, on average, do not differ considerably from those of primary teachers. A primary teacher gets on average 4,600 Soles a month, a secondary teacher some 4,800 Soles. The university professor earns two and a half times more.
- 62. The remuneration of teachers on the whole does not compare favourably with monetary rewards in other occupations in modern sectors requiring comparable educational levels. Qualified professors and instructors, particularly in science subjects, prefer employment in industry where they may earn 3-4 times more. However, in recent years there has been a definite improvement in teachers' working conditions: guaranteed pay, stability, promotion prospects, systematic salary adjustments, a guaranteed retirement pension, additional allowances, etc.
- 63. The following table presents estimates of per pupil recurrent costs for different levels and types of education for 1967 and 1970.

TABLE 3

RECURRENT UNIT COSTS (IN SOLES 1963)

Level and Type of Education	1967	1970	1970 Index
Pre-primary and Primary	1,207	1,548	100
General Secondary	3,102	3,870	250
Technical Secondary	4,807	6,541	423
- Agricultural	7,905	8,360	540
- Commercial	2,547	3,870	250
- Industrial	6,180	8,514	550
Teacher Training	11,490	11,765	760
Universities	10,729	13,642	880
- Education	7,224	9,163	591
- Humanities	7,989	10,133	654
- Medical	28,921	<i>36,6</i> 86	2,370
- Sciences	16,662	21,136	1,365
- Engineering	24,420	30,964	2,000

Source: Perú, Plan de Desarrollo Economico y Social, 1967-70, Educación

- 64. The above estimates are made on the basis of 1965 Soles. Application of a 1970 deflator as suggested by the Central Reserve Bank, will probably double the unit costs. The estimates of recurrent unit costs show that the teaching cost of a primary level child represents about a fifth of the average per capita income. They reveal furthermore, that secondary education, particularly its upper echelon, is relatively inexpensive. The underlying reason may be that secondary schools of all types are not always adequately staffed and equipped.
- 65. The above unit cost estimates for different faculties at the universities reveal wide fluctuations from 9,000 Soles to 36,000 Soles, giving an average recurrent cost per university student of 13,600 Soles (\$350). The existing wide disparities are due to factors such as teacher:pupil ratios, size of institutions, teachers salaries and expenditure on teaching materials and equipment. For international comparisons see Annex II.57.



LIST OF ANNEXES

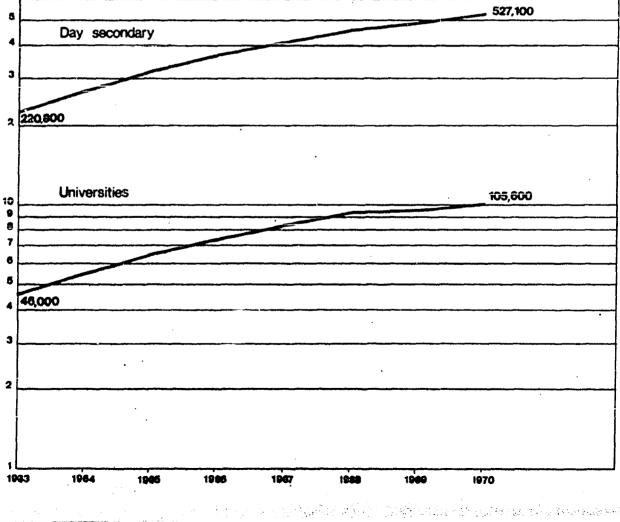
CHART 1	Formal Educational System: Enrolment Increases, 1963-70
CHART 2	Adult Education: Selected Enrolments, 1963-70
ANNEX II.1	Population of Peruvian Cities, 1940-75
	Rural and Urban Population, 1940-70
ANNEX II.3	Age Distribution of the Population, 1940-80
ANNEX II.4	Educational Level of Economically Active Population, 1970
ANNEX II.5	Total Allotments Following the Agrarian Reform Accumu- lated up to 30 June 1971
ANNEX II.6	Targets of the Agrarian Reform for the Five Year Plan, 1971-75
ANNEX II.7	Total Public Investments for the Agricultural Sector, 1971-75
ANNEX II.8	Fish Landings and Utilization
ANNEX II.9	Manpower in Fisheries (Catching)
ANNEX II.10	Classification of Ekippers
ANNEX II.11	Classification of Fishing Vessels by Tonnage and Needs
	for In-Service Training
ANNEY II.12	Active Population by Major Economic Branches (1970-80
	Estimates and Projections)
ANNEX II.13	Sectorial Distribution of the Economically Active Popu-
·	lation, 1961-70
ANNEX II.14	Occupational Structure of the Labour Force
ANNEX II.15	Unemployment by Educational Level, 1969-70
ANNEX II.16	Central Government Operations, 1965-70
ANNEX II.17(a)	Central Government Revenues, 1970-75
ANNEX II.17(b)	Central Government Operations, 1970-75
ANNEX II.18	Educational Administrative Structure
ANNEX II.19(a)	Population and Enrolment Pyramid, 1970
ANNEX II.19(b)	Total and School Population by Ages, 1970
ANNEX II.20	Evolution of the School System, 1963-70
ANNEX II.21	Enrolment Evolution in Day Schools by Levels and Grades, 1963-70
ANNEX II.22	Apparent Retention Rate in Several Cohorts in the Past
ANNEX II.23	Enrolment Evolution in Day Secondary Schools by Types and Grades, 1963-69
ANNEX II.24	Continuation Rate Between Secondary School and University
ANNEX II.25	Enrolment Ratios by Age
=	

ANNEX	II.26	Existing State Run Secondary and Post-Secondary Schools in Technical (Industrial) and Commercial Education in Peru
ANDEY	II.27	Agricultural Education, Peru
	II.28	Evolution of the Enrolments of the Agricultural Secon-
AMUEA	11.50	dary Institutions, 1963-70
A 2 10 11 11 11 11 11 11 11 11 11 11 11 11	TT 00	
AMMEA	II.29	Total Enrolments of the Agricultural Secondary Institu-
		tions and Centres, 1970
ANNEX	11.30	Student: Teacher Ratios for the Agricultural Secondary
		Institutions, 1967
	II.31	Evolution of the University System, 1960-70
ANNEX	11.32	Evolution of the University Enrolment by Faculties and Administrative Dependency, 1960-68
ANNEX	II.33	Universities in Peru Giving Courses in Engineering and
		Architecture
ANNEX	II.34	Enrolment and Graduates in Engineering and Architecture
ANNEX	II.35	Enrolments for the Different Agricultural Universities
		and Faculties for the Years 1964-68 and Outputs 1969
ANNEX	II.36	Total Enrolments of Fishery Students in the Different
	_	Universities, 1960-68
		Academic Programmes by University and Titles Granted
ANNEX	II.37	Private Post-Secondary Professional Schools - Lima and
	•	Provinces, 1970
ANNEX	II.38	SENATI Activities from 1963-70
ANNEX		1970-80: Enrolment Targets by Public and Private Systems
AMMEY		Evolution in the Participation of the Private Sector in
		Education (Day and Evening)
ANNEX	II.41(a)	Number of Teachers by Sex, Qualification, Level and Type
		of Education (Public and Private), 1970
ANNEX	II.41(b)	Evolution of the Teaching Staff, 1963-70
ANNEX		Enrolment of Teacher Training Colleges by Grades, Spe-
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		cialization, Administrative Dependency, 1968
ANNEX	TT.43	Sample Distribution of Pupils by Areas of Specialization
71444		in Teacher Training Centres, 1968-71
ANNEX	TT_UL	Universities Training Teachers for Secondary Technical
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Schools, 1968
ANNEX	TT. 45	Evolution of the Teacher Training Institutions, Public
		and Private, 1965-70
ANNEX	II.46	Distribution of the Enrolment by Areas of Specialization
		in Universities' Departments of Education, 1960-68
ANNEX	II.47	Technical Teacher Training Centres, 1970
ANNEX		General Secondary School Curriculum (Day Schools -
		1964-65 Regulations)

ſ.

ANNEX II.49	Plan of Studies Technical Secondary Education for Men,
	Daytime, 1971
ANNEX II.50	Plan of Studies Technical (Home Economics) Secondary
	Education for Women, Daytime, 1971
ANNEX II.51	Plan of Studies Commercial Secondary Education, Daytime, 1971
ANNEX II.52	Curriculum of the Secondary Animal Husbandry Schools
ANNEX II.53	Percentage Composition of the Various Teacher Training Courses Offered in Teacher Training Colleges, 1968
ANNEX II.54	Chronogramme of the Training Activities of CENCIRA, 1971
ANNEX II.55	Recurrent Unit Costs
ANNEX II.56	Comparative Recurrent Unit Costs (Primary Education Cost - Index 100), 1967-70

FORMAL EDUCATIONAL SYSTEM EFM/44 CHART No. 1 **ENROLMENT INCREASES 1963-1970** - 2,484,000 527,100



10

3

2

1,579,000

Day primary

ADULT EDUCATION EFM/44 CHART No. 2 **SELECTED ENROLMENT 1963-1970** 10 8 377,600 2 180,000 170,900 Evening primary 10 9 8 85,400 Evening secondary 5 33,800 23,500 Literacy classes 2 22 000 Artisanal training 10 9 3 1,100

1964

1963

1965

1966

1967

1968

1969

1970

POPULATION OF PERUVIAN CITIES, 1940-1975

City	Province	Census	Count	Intercensal Annual Growth	Estimated Population 000's							
		1940	1961	Rate %	1966	1969	1,970	1975				
Limal Callac Arequipa Trujillo Chiclayo Piural Cusco Chimbote Huan:ayo Iquitos	Circo	541,109 82,287 76,871 36,958 31,539 27,919 40,657 4,243 26,729 31,828	1,553,182 213,540 135,358 100,130 88,955 72,096 79,857 59,990 64,153 57,777	5.2 4.6 2.7 4.0 4.7 3.4 2.9	2,075.0 279.5 167.1 129.5 115.8 92.7 95.7 81.8 80.6 67.9	2,415.7 320.7 187.4 149.0 134.1 106.4 105.4 97.1 91.2 74.0	2,541.3 335.4 194.7 156.2 140.8 111.4 108.9 102.8 95.0 76.1	3,274.1 419.7 235.8 197.4 179.7 140.1 128.1 137.0 116.7 87.9				

1/ City in coastal region.

Source : Oficina Nacional de Estadística y Censos.

RURAL AND URBAN POPULATION, 1940-1970

	19 ¹	05t.)	Ann Popul Gro (1940-	ation wth	Men/ Women Ratio (1970	S: 0-14	Age tructure 1970 15-64	65+	Dependency Ratio				
	million	K	million	×	million	%	61) %	est.)	est.)	75	19-04	%	
Total	6.68	100.0	10.32	100.0	13.17	100.0	2.1	3.1	1,013	45.0	51.9	3.1	1.93
Ruzal	4.3 2	64.6	5.45	52.8	6.33	48.1	1.1	1.9	1,008	47.5	49.1	3.4	2.04
Urban 1/	2.35	35.4	4.87	47.2	6.84	51.9	3.5	4.3	1,018	42.8	54.3	2.9	1.84

Living in centres with more than 1,000 inhabitants.

Source : Ofinina Nacional de Estadística y Censos.

AGE DISTRIBUTION OF THE POPULATION 1940-80

Age Group	1	940	19	60	196	5	197	0	1975		1980	
Ago dicup	000¹s	ø	000¹s	×	0(10 ¹ s	*	000's	%	000° is	ĸ	000¹s	9.
Total.	6,680	100.0	10,026	100.0	11.,650	100.0	13,586	100.0	15,869	100.0	18,527	100.0
10-14 0-4 5-9	770 1,094 856	11.5 16.4 12.8	1,215 1,824 1,427	12.1 18.2 14.2	1,408 2,087 1,745	12.1 17.9 15.0	1,727 2,370 2,017	12.7 17.4 14.8	2,001 2,706 2,312	12.6 17.1 14.6	2,297 3,095 2,656	12.4 16.7 14.3
Total 0-14	2,720	40.7	4,466	44.5	. 5,240	45.0	6,114	45.0	7,019	44.3	8,048	43.4
15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64	659 571 490 423 362 307 257 235 189 154	9.5.7.5.4.6.8.5.8.7.6.5.4.5.2.2.	1,005 855 718 614 515 432 3555 289 230 180	10.0 8.5 7.2 6.1 5.1 5.5 2.9 2.8	1,198 985 833 699 596 499 414 336 268 206	10.3 8.5 7.1 6.0 5.1 4.3 3.6 2.9 2.3	1,392 1,178 965 816 684 580 482 395 314 242	10.2 8.7 7.1 6.0 5.0 4.3 3.5 2.9 2.3	1,712 1,374 1,160 949 801 669 564 462 372 287	10.8 8.7 7.3 6.0 5.0 4.2 3.6 2.9 2.3	1,987 1,694 1,357 1,144 9355 787 652 543 438 342	10.7 9.1 7.3 5.0 4.2 5.9 2.4 1.8
Total 15-64	3,646	54.6	5,193	51.8	6,033	51.8	7,048	51.9	8,350	52.5	9,879	53.3
Total 654	314	4.7	357	3.7	377	3.2	424	3.1	500	3.2	600	3.2

Source : Oficina Hacional de Estadística y Censos.

いっこう こうかい かんかん かいこうちょうかいしょ 大学 こうじょう 大学 大学 おおおお ないしょうしょう

EDICATIONAL LEVEL OF ECONOMICALLY ACTIVE POPULATION - 1970 (In S)

	Page.	usional:								0	coupatio	nel G	tegories	1									
LEVEL		echnici.		Mana	ers.		Esp loyes	13		Salesman		Trea	Transport Workers			fied Wo	rkers	Unqua	lifted	fortero	Serv	some 1	
	Lima	Pertions	Rest of Country	Lim	8 Peglons	Lima	Negione	Rest of Country	Lim	Regions	Rest of Country		Pegions	Rest of Dountry		8 Tegions	Rest of Country	Lisa	Det one	Rest of Country		8 Tagisme	
OTAL 111t-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	 	100.0		100.0	100
rates Monopi	•	•	5.0	•	-	-	-	1.1	8.4	12.5	25.8	1.6	1.4	•	0.9	7.5	27.1	3.1	7.1	4.9	13.2	i	32.
rimar; d.	1.8	1.5	5.4	5.4	6.1	1.7	4.1	8.5	22.0	28.1	3 9.6	22.8	26.0	33.7	24.0	31.7	3 0.9	39.5	37.2	45.1	39. 4	44.6	RO.
rimr; 1.	7.7	6.4	21.2	12.5	17.6	10.3	15.5	13.4	23.5	24.2	50.5	37.4	3 6.9	46.8	38.2	53.3	25.7	31.0	18.4	21.1	31.8	17.8	
e E	11.0	13.0	8.4	17.2	15.4	25.3	.26.5	27.8	21.0	18.8	13.6	25.7	22.4	15.7	22.9	19.4	14.1	19.1	27.7	27.1	9.6	1,12	15.
c. Ed	25.1	15.5	15.5	33.6	51.1	41.2	34.5	57.8	16.7	11.5	1,4	14.5	8,8	3.8	11.7	6.5	3.3	6.1	7.5	1.8	9.0	9.7 3.1	7.
	20.6	21.6	17.0	14.8	9.5	15.4	11.0	6.7	5.4	5.4	1.0	-	3.9	-	1.4	1.5	0.9	1.4	1.8		1.4	0.8	
eter	55.8	42.2	30.5	16.5	22.0	8.1	8.6	4.7	2.1	1.5	0.4	-	0.6	_	0.9	0.5	-	•	0.5		0.5	1.4	

Source: SERS-CEMO, Enquesta Macional de Mogares, 1970.

TOTAL ALLOTTENTS FOLLOWING THE AGRARIAN REPORM ACCUMULATED UP TO 30 JUNE 1971

Zone	Amount	Hectares	Individu	als	Cooperati	ves	Communici	e \$	S.A.I.	s.	т	otal
	Solas	nec citys			Hectares	Pan.	Hectares	Pam.	Hectares	Fam.	Pam.	Contracts
ı	174,411,118	15,081.10	4,668.58	2,546	10,412.51	1,815	•	•	-		4,361	3,018
r	3,411,410,536	80,789.98	9,000.81	1,991	56,081.17	10,217	15,708.00	560	•	- 1	12,568	983
T.CI	2,587,615,805	61,964.14	5,254.36	770	56,709.78	9,756	-	•	-	-	10,526	846
iv	1,104,003,152	23,750.06	6 ,2 71,57	1,350	14,914.23	3,191	2,558.25	478	-	-	5,019	1,428
A .	58,478,749	3,751.19	3,751.19	846	-	-	-	-	-	-	846	880
AI	109,540,370	4,253.06	2,703.22	884	1,549.84	474	-	•	-		962	508
WII.	9,162,750	1,200.75	648.63	163	552.11	85	-	-	-] -	248	188
AIXI	837,314	7,597.84	7,597.84	569	-	-	-	-	-	-	569	560
12	22,012,472	65,341.05	64,391.05	2,070	950.00	35		- 1	•	l -	2,105	2,070
X	544,595,424	1,076,719.50	55,456.14	2,671	259,298.43	2,99/	268,205.130	10,947	463,759.12	6,783	23,403	2,700
ХI	102,538,536	202,147.94	77,293.97	7,560	124,853.97	7,76	- 1	-	-		15,336	10,249
XII	183,346,793	220,018.14	5,762.29	69	113,749.85	580	6°4 .80	494	99,831.20	3 38	1,531	9ï
Total	8,308,003,082	1,762,614.80	242,875.69	21.,093	669,071.93	36,926	207,146.85	12,279	565,590.32	7,176	77,474	23,606
Agrarian Reform	8,090,854,017	1,610,699.63	104,352.94	15,237	655,609.51	34,754	287,146.85	12,279	563,590.32	7,176	69,446	17,521
Settle- mmts	217,149,064	151,915.16	138,452.75	5,856	13,462.41	2,172	_	-	•	-	8,028	6,032

Source: Ministerio de Agricultura. Oficina Sectorial de Planificación

Key to 2	ones
Ī	Tumbes, Piura
II	Lambayeque, Amazonas, Cajamarca (partial)
III	La Libertad, Cajanarca, Ancash (portial)
IV.	Ancash, Lima, Ruánuco (partial)
♥ :	Ica, Arequipa (partial), Huancavelica (partial), Ayacucho (partial)
AX.	Arequipa
AIX	Tacna, Moquegua
VIII	Woreto (partial)
1X	San Martin, Loreto, Huinuco (partial)
'Χ	Huanuco, Junin, Pasco, Huancavelica, Ayacucho
· XI	Apurimac, Cuzco, Madre de Dios
XXX	Puno

TARGETS OF THE AGRARIAN REPORM FOR THE FIVE YEAR PLAN 1971-1975

Agrarian Zones	1971-19	115	1973-1	.97 5	Total	
	Hootares	Pamilies	Heotaros	Families	Hectares	Families
I	69,200	12,763	650,714	16,207	749,914	28,970
n	121,900	9,637	678,071	19,034	799;971	28,671
m	450,000	19,000	986,470	8,063	1,436,470	27,063
IA	405,700	14,334	557,292	20,951	962,992	35,285
٧	105,814	5,238	541,338	16,375	447,152	21,613
VI	22,750	1,511	504,196	5,912	526,946	7,423
VII	5,100	750	240,284	6,830	245,384	7,630
х	413,900	16,543	1,776,367	17,040	2,190,267	33 , 583
XI	315,000	9,322	1,912,923	36,220	2,227,923	45,542
XII	995,000	12,000	411,0钟	2,000	1,406,044	14,000
Total	2,904,364	101,098	8,058,699	148,682	10,963,063	2 49 ,780

Source: Ministerio de Agricultura. Oficina Sectorial de Planificación modified.

TOTAL PUBLIC INVESTMENTS FOR THE AGRICULTURAL SECTOR, 1971-1975 (Million Soles) (Million Soles)

Programe	Total Cost	Investments up to end 1969	Programmed for 1970	Accumulated 1971-1975	Balanse
Agricultural Reform and settlements	1,519.2	99.2	86.0	1,192.0	142.0
Promotion	2,180.6	0.7	23.0	1,414.7	742.0
Commercialization	1,129.8	14.3	37.8	874.3	203.h
Research	298.8	0.5	51.9	265.4	•
Forestry and hunting	561.2	23.3	20.4	363.1	154.4
Irrigation	29,929.2	1,678.6	354.4	6,095.0	21,955.6
Pood programs	32.8	-		32.8	-
Comercal administration	92.0	-	7.1	84.9	-
Various projects	1,474.0	-	-	1,474.0	-
Total.	37,217.6	1,816.6	560.6	11,797.2	23,043.2
Central Government	36,552.9	1,816.6	537.5	11,389.8	22.809.0
Public Institutions	18.0		-	18.0	-
Public Enterprises	646.7	-	23.1	389.4	234.2

^{1/} CRYRZA and National Fund for the Economic Development investments excluded. Source: Plan del Perú, 1971-1975.

FISH LANDINGS AND UTILIZATION

(thousand metric tons)

	_			nousand movi		
	<u>1965</u>	<u>1966</u>	<u> 1967</u>	1968	<u>1969</u>	<u>1970</u>
<u>Potal</u>	7.392.2	8,712.3	10,034.1	10,440.2	2,143.4	12,475.9
1. Fish meal	7,260.7	8,555.0	9,858.8	10,284.9	8,977.0	12,297.9
2. Canning	31.7	42.6	26.5	25.0	27.2	35.0
3. Freening	12.5	15.8	27.7	21.3	3	24.2
4. Saltod	12.4	26.3	42.0	24.2	22 . ó	18.5
5. Fresh	74-9	72.3	79.1	84.8	95•3	100.3
Sub-total food fish (2+3+4+5)	131.5	157.0	<u>175.3</u>	<u>155.3</u>	166.4	<u> 178.0</u>
Total emports	28.0	28.0	24.0	21.8	28.0	-
Cauning	13.2	13.2	5.0	4.7	4.0	-
Freesing	14.4	14.4	18.5	16.8	23.7	-
Sailted	0.4	0.4	0.5	0.3	0.3	-
Ford fish left for domestic consumption	103.5	129.0	151,3	133.5	138.4	150.0 1/
Population ('000)	11,750	12,112	12,486	12,771	13,171	13,586
Fish consumption per capita (kg) 1/ Estimate	8.8	10.6	12.1	10.4	10.5	11.0

MANPOWER IN FISHERIES (CATCHING)

	Unakilled	Ski	lled
·	fisherman	skippers	engineers
Food fish inshore fleet	7,000	160	160
Anchoveta fleet	16,000	1,500	1,500
Total	23,000	1,660	1,660

Source: Ministerio de Pesquería

^{1/} Boats over 10 tons capacity.

CLASSIFICATION OF SKIPPERS

Certificates	Ability to run boats (tons capacity)	Distance from coast (in miles)	8 -	Humber of certificates delivered
Master Mariner skipper	> 500	> 300	600 days as 1st class skipper	. 1
lst class skipper	250-500	≰ 300	400 days as 2nd class skipper	•
2nd class skipper	120-250	≰ 120	400 days as practical akipper	136
Practical skipper	< 120	< 80	4 years as fisherman	> 2,456

Source: Ministerio de Marina, Decree No. 21, October 1968

N.B. Before Decree No. 21 was passed, the Ministry of Marine had issued over 4,900 practical skipper licences to people having a minimum of 4 years' experience at sea and having passed the required courses. As more certificates had been granted than there are boats, a renewal of certificates has been made in accordance with Decree No. 21.

CLASSIFICATION OF FISHING VESSELS BY TORNAGE AND NEEDS FOR IN-SERVICE TRAINING

Category of boats	Number of	boats	Skipper certificate	Needs for	
(tons capacity)	Food fish Anchovets		required	in-service upgrading	
>500	-	•	Master Mariner (1)	-	
250-500	1	215	lst class skipper (-)	216	
120-250	. 3	532	2nd class skipper (136)	399	
< 120	2,9581/	<i>75</i> 8	Practical skipper (2,456)	-	

1/ Including: (a) 64 vessels of 50-120 tons; (b) 93 vessels of 10-50 tons;

(c) 2,801 craft of 1-10 tons, of which about 950 only are motorized

and manned by skippers holding "practical" certicate.

Source: Ministerio de Marina

ACTIVE POPULATION BY MAJOR ECCIOMIC BRANCHES (1970 - 1980 ESTIMATES AND PROJECTIONS) (III THOUSANDS)

	1961 National Population Census		1970 Official Estimates		1980 0.E.C.D. Projections		1980 Preliminary Projection of the S.E.R.H.	
Agriculture	1,534	\$ 49.2	1,887	₩ 45.3	2,311	% 41.4	2,226	\$ 37.6
Pishing	21	0.7	24	0.6	42	0.9	26	0.4
Mining	66	2.1	81	2.0	94	19	115	1.9
Manufacturing	411	13.2	593	14.6	912	16.2	1,233	20.8
Construction	104	3.3	125	3.1	513	9.1	197	3 3
Commerce and Banking	282	9.0	460	11. 3	626	11 1	702	11.8
Services of	703	22.5	897	219	1,079	19 4	1,422	24.0
Total B.A.P.	3,121	100	4,067	100	5,82j ² /	150	5,9322/	100

Note: 1/ Includes transport and power.

2/ The heading "non-specified" has been omitted since it does not provide any bases for comparisons or estimates.

Source: Prepared by the Mission.

SECTORIAL DISTRIBUTION OF THE ECCEOMICALLY ACTIVE POPULATION (1961-70)

·	1961		19	770	Average Growth Rate per Annum
	000s	\$	000a	\$	8
Agriculture Fishing Mining and Petroleum Manufacturing Construction Commerce Services	1,597 22 70 429 108 290 735	49.1 0.8 2.1 13.2 3.3 8.9 22.6	1,888 24 82 592 129 459 893	46.4 0.5 2.0 14.6 3.2 11.3 22.0	1.9 1.0 1.8 3.6 2.0 5.2 2.2
Total Employment Unemployment	3,251 105	100.0	4,067 201	100.0	2.5 7.5
Total E.A.P.	3,356		4,26 8		2.7
Total Population	10,300		13,600		3.1
Labour force parti- cipation rate		32.5		31. ⁴	

Source : Estimated on the basis of data supplied by the Ministry of Labour

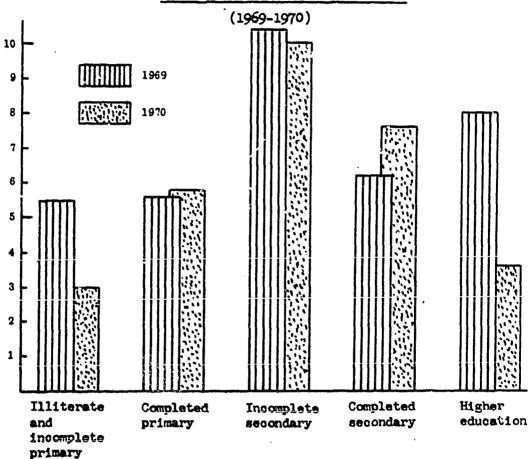
OCCUPATIONAL STRUCTURE OF THE LABOUR FORCE

Occupational Group	. 1961	1970
Professionals	3.5	4.7
Managers	1.5	1.7
Office Workers	4.5	5.9
Salesmen	7.6	9.4
Agricultural Occupation	49.1	46.4
Hinars	1.2	0.7
Transport Workers	2.4	3.0
Artigans	17.0	16.4
Semi-skilled Workers	3.3	3.0
Unskilled Workers	9.9	8.8
TOTAL	100.0	100.0

Sources: DEEC VI Censo de Población 1961; SERH-CEPO Encuesta Macional de Hogares 1970



UNEMPLOYMENT BY EDUCATIONAL LEVEL



Source: SERH-CEMO 1970, Encuesta de Hogares

CENTRAL GOVERNMENT OPERATIONS 1965-1970

(In millions of soles)

	1965	1966	1967	1968	1969	1970 Mission Estimates
Current Revenue	17,164	20,052	23,194	30,023	33,406	36,284
Taxes on income, property and exports Taxes on imports Taxes on production and	4,084 4,991	4,192 5,623	6,516 6,382	10,418 7,327	10,696 7,816	13,803 7,485
consumption Other tax and non-tax rewait Transfers from decentral-	6,049 e1,790	7,328 2,536	7,650 2,143	9,315 2,584	10,799 3,645	11,253 3,426
ized agencies	250	373	503	379	452	30 8
Current Expanditure	16,244	19,459	23,513	27,739	28,667	31,098
Vages and salaries Purchases of goods and	8,129	10,023	10,947	726, ינ	12,490	13,339
services Military outlays Interest payments	1,033 3,286 573	1,001 3,575 623	851 5,340 1,141	1,004 7,046 1,395	1,464 6,932 1,795	1,500 6,722 2,764
Current transfers 1. To decentralized	3,223	1,237	5,234	6 ,5 68	6,086	5,619
agencies 2. Other	(2,009) (1,214)	(2,420) (1,817)	(3,252) (1,982)	(4,518) (2,050)	(3,705) (2,381)	(3,075) (2,544)
Outlays for earthquake ralief	•	-	-	-	-	1,154
Current Surplus or Deficit (-)	920	593	-319	2,284	4,741	5.186
Capital Revenues	<u> </u>				-	4501
Capital Exponditure Gross capital formation	4,088	5,739 3,311	6,027 2,983	5,257 2,603	5,698 2,847	7,907 3,907
Capital transfers Financial investment	2,446 9	2,399 29	3,023 16	2,649 5	2,621 230	3, 472 469
Overall Surplus or Deficit (-)	-4,068	-5,146	-6,346	-2,973	-957	-2,271
Financing Foreign financing (net) 1. Drawings 2. Amortization 3. Debt relief Domestic financing (net)	4,068 515 (809) (-294) (-) 3,553	5,146 2,716 (3,132) (-416) (-) 2,430	(-) 3,313	2,973 1,750 (3,290) (-2,511) (971) 1,223	(1,741) 21	-2,271 -1,897 (1,166) (-4,509) (1,446) 4,168)
1. Banking system (net) 2. Other	(3,95() (-404)	(2,279) (151)	(2,725) (594)	(1,525) (-502)	(-565) (544)	(2,854) (1,314)

^{1/} Earthquake foreign grants.2/ To decentralized agencies.

Source: IERD/IDA Report, 1971.

CENTRAL GOVERNMENT REVENUES, 1970-75
(In million Soles at 1970 prices)

	Mission Estimates 1970	1971	1972	1973	1974		Average annual rate of growth 1970-75 (%)
Present Tax System	<u>35,976</u>	<u>36,977</u>	<u> 38,784</u>	40,681	42,674	44,766	4.5
Taxes on income, property and exports Taxes on imports Taxes on production and consumption Other tax and non-tax revenues	13,808 7,483 11,253 3,426	13,484 7,954 11,959 3,580	14,091 6,455 12,497 3,741	14,725 8,988 13,059 3,909	15,388 9,554 13,647 4,085	16,030 10,156 14,261 4,269	3.1 6.3 4.8 4.5
New Rovenue Masures		2,000	<u>2,283</u>	2,514	2,646	2,880	<u>-</u>
Gasoline tax Diesel oil tax Automobile licence fee Personal income tax Urban property tax Corporate net worth tax Inheritance tax	-	300 700 400 100 100 200 200	321 749 428 105 200 240 240	343 801 458 109 300 253 250	368 858 490 114 300 260 256	303 918 524 119 300 326 300	-
Total Revenues	35,976	<u>39,030</u>	41,067	43,195	45,320	47,646	5.8

Source: IERD/IDA Report, 1971

CENTRAL COVERNMENT OPERATIONS, 1970-1975

(In 1970 million Soles)

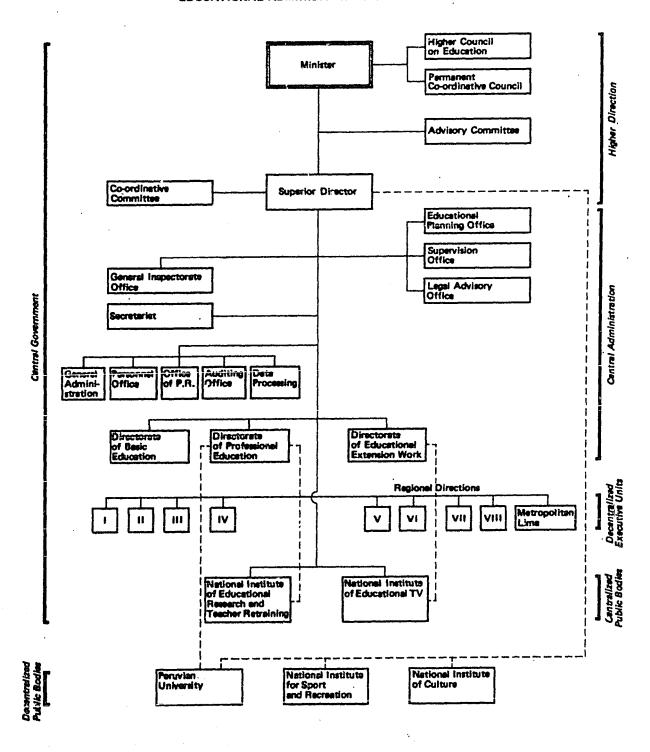
	Mission Estimates		Miss	sion Project	ions	
	1970	1971	1972	1973	1974	1975
Current Favermen Present tax system New reverse measures	35,976 35,976	39,030 36,977 2,000	41,067 38,784 2,283	43,195 40,681 2,514	45,320 42,674 2,646	47,646 44,766 2,880
Current Expenditures Wages and salaries Purchase of goods and services Military outlays Interest payments Current transfers Outlays for earthquake relief Current Account Savings Savings ratio (% current revenues) Covernment Revenues as a Ferientage of GDP:	28,023 13,339 1,500 6,722 2,764 2,544 1,154 7,253 22.0	30,646 14,086 1,650 7,096 3,765 3,247 1,000 6,184	31,196 14,875 1,815 7,496 3,491 3,519 - 9,871 24.0	32,149 15,700 1,996 7,916 3,560 2,969 - 11,045	33,145 16,587 2,196 8,359 3,902 2,101 - 12,175 27.0	34,326 17,516 2,16 8,827 3,655 1,912 - 13,320 28.0
a). With new tax measures b) Without new tax measures	15.9 15.9	16.5 15.6	16.5 15.6	16.4 15.4	16.2 15.3	16.1 15.1

^{1/} Excludes transfers from rest of public sector.

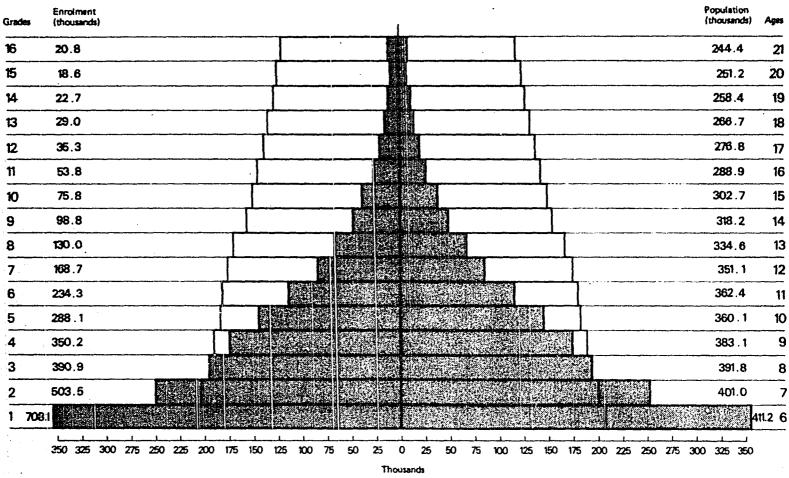
To the private sector.

Source: IERD/IDA Report, 1971.

^{3/} Net of transfers to and from the rest of the public sector.

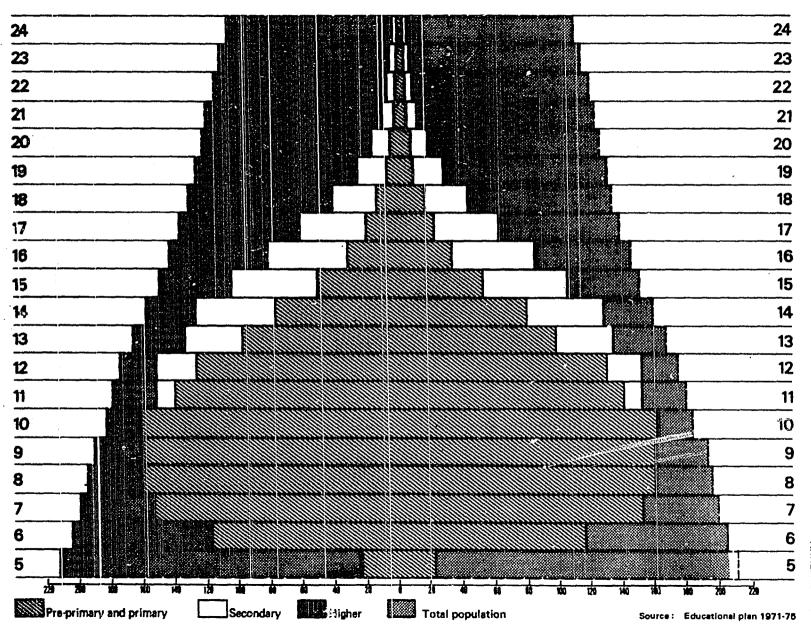


POPULATION AND ENROLMENT PYRAMID 1970



のでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmのでは、100mmの

TOTAL AND SCHOOL POPULATION BY AGES 1970



ANNEX 11, 19 (

EVOLUTION OF THE SCHOOL SYSTEM 1963 - 1970 (ENRALMENT - TRANSAMB)

	1963	1964	1965	1966	1967	1968	19692/	1970 ^{2/}
Potel Eurelment	2,370.4	2,494.6	2, <i>62</i> 6 4	2,787.45	2,955.57	3,140.7	n.a.	n.e.
Pre-Primary	37.8	46 4	49.4	57.1	62.6	68.9	74.8	86.0
Day Primary	1,579.1	1,789.9	1,900.6	2,022.8	2,110.9	2,199 8	2,321.2	2,484 1
Evening Primary	65.4	96 3	104.0	128.4	125.5	134 0	n.a.	180.0
Day General Secondary	182.9	230.5	271.7	307.7	348.2	386.2	410.3	505.7
Evening General Sec.	22.0	29.8	39.2	60.8	76.2	86.4	127.5	170.9
Agricultural Secondary	5.1	7.0	9.0	10.6	12.9	13.4	12.9	13.5
Industrial Secondary	50.5	24.8	21.9	29.4	32.5	35.6	38.2	44.0
Day Comercial Sec	12.6	15.1	16.5	17.8	20.9	23.6	26.2	
Evening Commercial Sec.	10.2	12.7	15.3	17.2	19.9	22.5	n.a.	n.a.
Intermediate Education		0.40	0.60	0.65	0.97	1.6	n.a.	6.2
Teacher 'Fraining	7.5	12.2	14.7	18.0	17.6	19.8	19.6	n.a.
University	46.0	54.2	64.5	73.9	83.5	93.9	96.5	105.6
Ateracy Programme	371.6	167.9	101.8	29.6	26.6	33.8	n.a.	n.a.
Artissnal Training	1.1	3.4	6.7	8.7	12.1	15.7	n.a.	23.5
Semi-skilled and Ekilled Horker-Training	2.9	4.0	4.5	4.8	5.2	5.5	n.a.	n.a.

Hote: 1/ Only the schools under the Ministry of Education; public and private.

2/ Evening courses are estimated.
3/ Not including "Capacitación Agropecuaria.

Source: Diagnostico del Sistema Educativo, Ministeriode Educación 1969, up-dated according to the Educational Plan.

ENROLMENT EVOLUTION IN DAY SCHOOLS BY LEVELS AND GRADES 1963-1.970

(Thousands)

		1963	1964	1965	1966	1967	1968	1969	1970
1.	Pre-Primary	37.8	46.4	49.4	57.1	62.6	68.9	74.8	86.0
2.	Primary				}				
	Total	1,579.1	1,789.9	1,900.6	2,022.8	2,110.8	2,199.7	2,321.2	2,475.1
	Tr.	512.6	595.9	613.4	633.7	636.2	648.7	675.9	708.1
	1	330.6	363.7	392.8	417.7	428.6	444.0	464.9	503.5
	2	249.3	275.7	291.2	315.9	334.7	346.9	367.8	390.9
	3	205.3	237.2	251.9	269.9	290.3	309.1	328.5	350.2
	4	159.7	180.4	199.5	216.0	233.9	250.7	267.2	288.1
	5	121.6	137.0	151.8	169.6	187.1	200.3	216.7	234.3
3.	Secondary								
	Total	220.8	277.4	325.2	365.6	414.4	458.8	487.6	527.1
	1	69.9	96.8	111.8	121.9	133.9	145.3	151.0	168.7
	2	52.6	61.9	77.5	87.5	98.7	106.8	112.0	130.0
	3	41.4	51.2	56.6	67.5	78.1	86.3	92.4	98.8
	4	31.2	37.8	45.4	49.6	60.5	68.5	73.2	75.8
	5	25.7	29.7	33.9	39.1	43.2	51.8	59.0	53.8
L						<u> </u>			1

Source: Ministerio de Educación, División de Estadísticas Escolares

APPAIENT RETENTION RATE IN SEVERAL COHORDS IN THE PAST (DAY CLASSES)

Primary	Schools	General Secondary Schools			
Years	<u>\$</u>	<u>Years</u>	<u>%</u>		
1963 - 68	39.1	1953 - 67	66.7		
1964 - 69	36.4	1964 - 68	56.9		
1965 - 70	38 2	1965 - 69	56.0		

Continuation Rate between Primary and Secondary Education (total) (Day Classes)

Years	*
1963-4	79.6
1964-5	81 6
1965-6	80.3
1966-7	78 9
1967-8	77.6
1968-9	75 4
1969-70	77.8

Source: Annexes II.21 and II.25

EFM/44 ANNEX II.23

ENROLMENT EVOLUTION IN DAY SECONDARY SCHOOLS BY TYPES AND GRADES, 1963-1969

	1963	1964	1965	1966	1967	1968	1969
a) General Secondary Total 1 2 3 4 5	182,904	230,461	271,667	307,732	348,191	366,248	1,11,000
	55,731	77,868	90,824	100,643	110,082	119,231	122,000
	43,469	50,869	64,263	72,838	82,705	89,714	94,000
	35,010	43,567	47,957	57,183	65,907	73,950	80,000
	26,875	32,636	39,491	43,186	52,350	59,050	64,000
	21,819	25,522	29,132	33,882	37,147	44,295	51,000
b) Industrial Secondary Total 1 2 3 4 5	20,197	24,773	27,923	29,413	32,487	35,605	38,000
	7,866	10,214	11,205	10,698	11,570	13,103	15,000
	4,910	5,959	6,960	7,573	7,742	3,241	9,000
	3,480	4,096	4,592	5,477	6,219	5,998	6,000
	1,999	2,528	2,841	3,009	4,000	4,621	4,000
	1,942	1,976	2,325	2,576	2,956	3,640	4,000
c) Commerce Total 1 2 3 4 5	12,594	15,102	16,525	17,794	20,870	23,563	27,000
	4,629	5,886	6,124	6,591	7,702	9,137	11,000
	2,923	3,607	4,079	4,379	5,027	5,510	6,000
	2,041	2,311	2,718	3,044	3,579	3,729	4,000
	1,584	1,803	1,939	2,112	2,494	2,782	3,000
	1,417	1,495	1,625	1,668	2,058	2,410	3,000
d) Agriculture Total 1 2 3 4 5	5,121 1,688 1,278 834 726 545	7,021 2,789 1,477 1,207 860 688	8,989 3,588 2,176 1,326 1,101 798	10,612 3,927 2,744 1,798 1,156 907	12,865 4,510 3,256 2,419 1,615 1,065	13,446 3,819 3,380 2,645 2,122 1,480	14,000 4,000 3,000 3,000 2,000 2,000

Source: Ministerio de Educación, División de Estadísticas Escolares

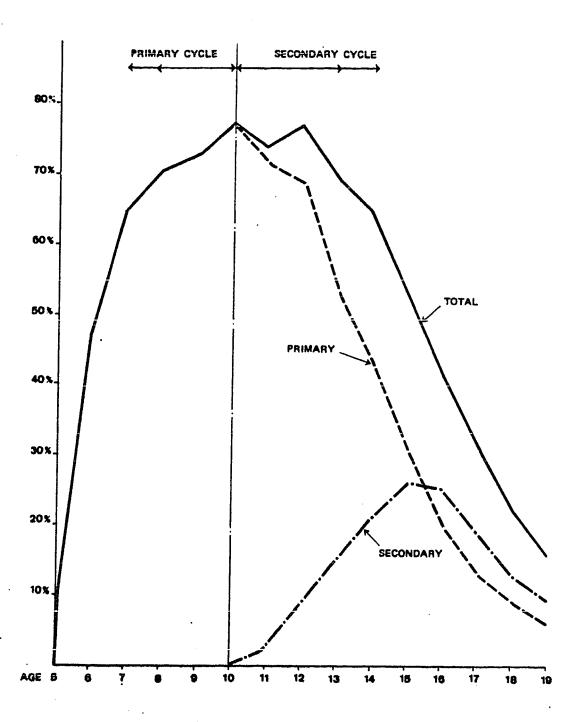
JONFINUATION RATE EETWEEN SECONDARY SCHOOL AND UNIVERSITY

	Sec. School Grad.	% of Grad.Applic. to Uni	Applic. to Uni:	Accepted by Univ.	% of Univ. Accepted to Sec.Schl Grads.	by Intermed		Total Accepted in Post Sec.Ed	万 of Total Accepted to Sec. Grads
1959-1960	17,305	84.7	14,665	5,430	31.4	•	-	-	
1960-1961	19,504	879	16,762	7,060	35.2	-	-	-	-
1961-1962	23,002	86.9	19,990	8,577	37.3	-	_	-	-
1962-1963	26,615	92.5	24,623	9,719	3 6.5	-	_	-	-
1963-1964	27,909	101.7	28,379	8,648	31.0	-	-	-	-
1964-1965	32,390	106.1	34,340	15,766	48.7	557	6,136	22,123	- 68.3
1965-1966	36,839	118.9	43,804	17.105	46.4	239	6,192	23,536	63. 9
1966-1957	43,717	120.6	52,720	19,499	44.6	3 58	4,619	24,476	56.0
1967-1958	1,3,057	113,4	57,858	22,268	45.6	948	3,846	27.062	55.4
1968-1959	93,964	110.7	59,739	24,124	44.7	n.a.	n.a.	n.a.	n.a.
1969-1970-	55,481	115.5	64,113	22,665	40.8	2,288	3,038	27,591	49.7

Source: Cuadernos del CONUP, No. 1. and data provided by Statistical Office.

^{1&#}x27; Estimated.

PERU ENROLMENT RATIOS BY AGE



EXISTING STATE RUN SECONDARY AND FOST-SECONDARY SCHOOLS IN TECHNICAL (INDUSTRIAL) AND COMMERCIAL EDUCATION IN PERU

Type of School	No of Schools in 1971	Total Enrolment in 1970	No of Years Attendance	Level of Recruitment	Average Enrolment per School
INDUSTRIAL EDUCATION FOR MEN (Industrial Arts)	56 ¹ /	28,536 5 (of which (grades 7-11) 5,758 in evening courses)		End of Primary (6 grades)	509
INDUSTRIAL EDUCATION FOR WOMEN (Home Economics)	⁴⁹ 1 /	23,678 (of which 2,471 in evening courses)	5 (grades 7-11)	End of Primary (6 grades)	483
COMMERCE (men, women or coed)	61	50,300 (day and evening)	5 (grades 7-11)	End of Primary (6 grades)	824
POST-SECONDARY TEXH- NICAL EDUCATION (called INTERMEDIARY EDUCATION)	8 (of which 2 in commerce)	2 ,8 25	2-3 (grades 12-15 or 14)	End of Secondary (11 grades)	278
TOTALS	174	104,739			601

^{1/} These figures do not include the capacitation centres

Source: Various statistics from the Ministry of Education

AGRICULTURAL EDUCATION, PERIL

Name of Institution	Level of Recruitment	No of years Course	Total Enrolment 1970	Activities of the Graduates	Teacher/student Ratio
95 Institutos Macionales Agropocuarios	End of Primary education	5	14,985	Extensionists by Min. Ag. Instructors at INA Self-employment Private Sector	Prom 1:6 ··
21 Centros de Capa- citación Técnica Agro- pecuaria	ditto	3	608 (lst year)	ditto	to 1:13 (average 1:5.6)
Escualas de Perito Agricola: a) Huancayo b) Urubamba c) Tacna	End of Secondary education	3	1 4 5 53 82	Extensionists by Min. Ag. Instructors at some schools Ag. industries	Most of the schools have not reached the total enrolment capa- city
Instituto Macional Agrario Chincha	ditto	3	68		
Instituto Tecnico SuperiorAgricola Canete	ditto	3	104		Some of them have the two levels
Instituto Tecnico Superior, Andahuaylas	ditto	3	40 (1971)		
Colegio Regional, Tarma	ditto	3	about 60		
Universidad Agraria, Lima	ditto	5	1,708 (1968)	Min. Ag. Nin. Ed. Ag. Industry	1:6.5 (1967)
Universidad Agraria da la Selva, Tingo María	ditto	· 5	171 (1968)		1:2.6 (1967)
20 Agricultural Faculties	ditto	5	3,029 (1968)	Private industry Self-employment	1:5.9 (1967) average for all faculties

Institutions with other specializations Including veterinary science, forestry and animal husbandry

1/ 2/

EVOLUTION OF THE ENROLMENTS OF THE AGRICULTURAL SECONDARY INSTITUTIONS

1963 - 1970

	1963	1964	1965	1966	1967	1968	19691/	1970
Total	5,121	7,021	8,989	10,612	12,865	13,446	14,000	15,754
1	1,688	2,789	3,588	3,927	4,510	3,819	4,000	4,908
2	1,278	1,477	2,176	2,744	3,256	3,380	3,000	3,23 8
- 3	884	1,207	1,326	1,798	2,419	2,645	3,000	2,752
4	726	860	1,101	1,155	1,615	2,122	2,000	2,667
5	545	688	798	987	1,065	1,480	2,000	2,189

1/ Rounded estimates

Source: Ministerio de Educación, División de Estadística Educativa

EFM/44 ANNEX II.29

TOTAL ENROLMENTS OF THE AGRICULTURAL SECONDARY INSTITUTIONS AND CENTRES - 1970

Department	No. of Insti- tutions	Total enrol- ments	Average Insti- tutions	lst	2nd year	3rd year	4th year	5th year
Amazonas	3	395	131.7	122	86	65	59	63
Ancash	8	872	109.0	264	181	148	157	
Apurimac		311	155.5	106	70	49	55	
Arequipa	8 2 2	275	137.5	83	63	35	53	
Ayacucho	8	754	94.3	236	183	149	104	
Cajamarca	7	1,087	155.3	265	209	220	208	
Callao	_	-	-	_		-	_	
Cuzco	6	978	163.0	331	211	184	137	115
Huancavelica	10	772	77.2	388	96	101	106	
Fuánuco	4	377	94.3	106	96	64	63	48
Ica	2	237	118.5	58	49	43	38	49
Junin 💮	11	1,256	114.2	402	240	232	245	
La Libertad	4	713	178.2	228	148	116	119	102
Lambayeque	3 5 6	613	204.3	192	97	101	102	121
Lima	5	555	111.0	165	119	95	88	88
Loreto		842	140.3	276	190	148	137	91
Madre de Dios	1	93	93.0	19	27	23	24	_
<u>Moquegue</u>	1	89	89.0	29	21	12	18	9
Pasco	4	429	107.3	139	59	86	72	73
Piura	10	1,451	145.1	431	310	231	257	555
Puno	11	1,843	167.5	608	405	329	277	224
Son Martin	6	782	130.3	228	159	130	152	113
Tacna	1	122	122.0	<i>3</i> 5	29	22	22	14
Tumbes	1	133	133.0	13	<i>3</i> 9	24	35	22
Total	116	14,979	129.1	4,724	3,087	2,607	2,528	2,033
Secondary courses	at "Bsou	elas de	Perito Ag	pricola	tī.			
Junin 1	_						36	
Ouzeo	1	39 224	39.0 p	71		=	16	23
Lima	il	268	268.0	60	43	29	37	34
Tacna	il	91			59 21	57 11	50	42 24
TUCIES		91	91.0	15	21	11	20	24
Grand Total	120	15,601	150.2	4,870	3,210	2,714	2,651	2,156

Source: Prepared by the Mission

LIUDENT/TEACHER RATIOS FOR THE AGRICULTURAL SECONDARY INSTITUTIONS - 1967

Departments	Total enrol- ment	Total teachers	Student teacher
Total Republic	12, 8 65	1 345	9 6
Amaronas	255	31	8
Ancash	691	34	8
Apurimac	2 3 0	20	12
Arequipa	204	- 24	12
Ayacucho	557	66	8
Cajamarca	1,253	118	11
Callao	-	-	
Cuzco	706	59	12
Huancavelica	643	101	б
Huánuco	329	54	. 6
Ica	201	29	7
Junín	656	87	8
La Libertad	518	62	8
Lambayeque	598	54	11
Lima	798	89	9
Loreto	732	60	12
Madre de Dios	46	8	6
Moquegua	115	18	6
Pasco	3 65	3 8	10
Piura	1,401	139	10
Puno .	1,521	121	- 13
San Martín	653	57	11
Tacna	105	10	11
Tumbes	203	16	13

Source: Ministerio de Educación - División de Estadística Educativa.

EVOLUTION OF THE UNIVERSITY SYSTEM (1960-1970)

	Number of	Enrolment	llew	Out	tput	Number of	Number of
	Universities	Sar Olingite	Entrants	(Graduates 1/	"Titulados"2/	Teaching Staff 3/	Adm. and Service Pers.
1960	10	50,983	5,429	n.a.	n.a.	3,544	1,259
1961	15	34,995	7,060	n.a.	n.a.	3,432	1,385
1962	55	40,696	8,577	n.a.	n.a.	4,614	1,751
1963	24	46,032	9,719	n.a.	. n.a.	5,450	2,053
1964	27	54,230	8,648	n.a.	n.a.	6,193	2,576
1965	28	64,541	15,766	n.a.	n.a.	7,125	2,803
1966	3 0 .	73,925	17,105	2,265	4,688	8,474	2,887
1967	32	83,509	19,499	2,678	4,410	9,648	3,410
1968	34	93,903	22,268	2,623	5,296	9,889	3,209
1969	34	96,533	21,118	3,062	5,153	8,493	6,725
1970-	33	105,612	25,452	n.a.	n.a.	11,817	5,241

Scurce: COMUP, Memoria 1969-70, and Dirección de Planificación Universitaria.

^{1/} Including "Bachilleres" and "Doctores"

^{2/} Including professional certificates.

² Including professors and laboratory assistants.

^{4/} Estimates.

EVOLUTION OF THE UNIVERSITY ENROLMENT BY FACULTIES AND ADMINISTRATIVE DEPENDENCY, 1960-1968

•	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970 ¹ /
Total Enrolment Percentage Public	30,983 89.6	34,993 88.9	40,696 87.4	46,032 85.9	54,230 87.3	64,541 83.7	73,923 81.4	83,509 79.1	93,903 78.4	96,533 76.9	105,612
Faculties of Science	2,664	3,044	3,239	2,989	3,640	3,367	3,905	4,347	4,760	4,473	4,853
Percentage Public Percentage of total enrolment	100.0 8.6	100.0 8.9	100.0 8.0	100.0 6.5	100.0 6.7	100.0 5.2	92.4 5.3	90.5 5.2	90.1 5.1	93.6 4.6	4.6
Raculties of Educa-	6,381	7,674	10,565	13,138	17,565	23,730	26,505	29,119	31,953	22,926	34,219
Percentage Public Percentage of total enrolment	89.2 20.6	90.2 21.9	89.7 26.0	86.3 28.5	90.4 32.4	78.5 3 6.8	77.5 35.9	75.8 34.9	72.6 34.0	83.6 23.7	32.4
Faculties of Humanities	11,855	13,635	15,273	17,226	19,163	22,481	26,468	29,590	34,695	45,511	42,021
Percentage Public Percentage of total enrolment	81.0 38.3	79.9 39.0	77.9 <i>3</i> 7.5	78.1 37.4	82.5 35.3	80.9 34.8	77.5 35.8	76.2 35.4	76.4 36.9	65.4 47.1	39.8
Faculties of Eng.	6,303	6,575	7,513	8,679	9,609	10.534	12,417	15,201	16,487	16,769	18,145
Percentage Public Percentage of total enrolment	95.7 20.3	94.3 18.8	94.5 18.5	93.7 18.9	95.9 17.7	96.9 16.3	91.4 16.8	83.8 18.2	86.3 17.6	88.5 17.4	17.2
Faculties of Medicine	3,780	4,065	4,106	4,000	4,,253	4,429	4,628	5,252	6,006	6.859	6,374
Percentage Public Percentage of total enrolment	100.0	100.0	93.4 10.0	90.4 8.7	83.1 8.3	82.7 6.9	90.5 6.3	90.2 6.3	89.5 6.4	91.8 7.1	- 6.0

Source: COMUP, Dirección de Planificación, Bol. 4, 1970; Cuardernos no. 3, 1970 and Memoria 1969-70.

ANNEX 11

UNIVERSITIES IN FERU GIVING COURSES IN ENGINEERING AND ARCHITECTURY

NAME OF UNIVERSITY	Technology	Naval Architecture	Civil	Electrical	Geological	Industrial	Mechanical and Electrical	Fluid Mechanics	Mining and Metallurgy	Production	Petroleum	Chemical	Chemical (Industrial)	Sanitary	Architecture	Architecture (Assistants)	Visual Arts	Building Construction	Electrical (Assistants)	Electronic	Mechanical
Trujillo San-Antonio Abad San-Antonio Abad San-Agustin Engineering Centro del Peru Federico Villaroal Técnica dell Callao San Luis Gonzaga Tecnica de Cajamarca Lambayeque Mayer de Sun Marcos Tecnica de Piura San Cristobal de Huamanga Daniel Alcides Carrion Amazonia Peruana FRIVATE UNIVERSITIES Ciencias y Tecnologia Católica del Peru	X	X	x x x x	X	Х	x	x x	x	X X	x	х	x	x x	x	x x x x x x	X X X X	x	x		x	x

Source: Frepared by the mission from data taken from CONUP documents

S	Errol	ment	Graduat	es 196 9
Speciality	1968	1969	· Bachelor¹s degress	Professional titles
Civil Engineering Geology Industrial Engineering Chemical Engineering Mechanical and Electrical Engineering Architecture Electronics Engineering Industrial Chemical Engineering Mining and Metallurgical Engineering	2,953 605 656 1,291 1,817 1,203 275 370	2,890 570 868 2,038 1,508 1,258 N.A.2 N.A.	38 29 - 30 9 15 N.A. 16	169 44 86 163 83 24 N.A.
Petroleum Engineering Sanitary Engineering Production Engineering Fluid Mechanics	117 145 69 N.A.	N.A. N.A. N.A.	- - N.A.	34 1 N.A.
Totals	9,693	. -	137	645

Notes: 1/ Encholor's degrees and professional titles were conferred in 15 State Universities and 2 private ones.

2/ Includes also diplomas and certificates.

3/ Not available

PERCENTAGES OF UNIVERSITY STUDENTS BY DISCIPLINES (1969)

Discipline	*
Total 1. Sciences 2. Education 3. Humanities 4. Engineering and Architecture	100 5.3 40.4 24.6 20.7 (includes specialists in agriculture and fisheries)
5. Medicine	9

Sources: Statistical data taken from publications of the CONUP (Consejo Nacional de la Universidad Peruana).

ENROLMENTS FOR THE DIFFERENT AGRICULTURAL UNIVERSITIES AND FACULTIES

FOR THE YEARS 1964 - 1968 AND OUTPUTS 1969

							Enr	olmen	t s							0	utput	Outputs		
•		1964			1965			1966			1967			1968		<u> </u>	1969			
	Totel	М	P	Total	М	P	Totel	М	P	Total	М	P	Total	м	P	B ¹	D _S	τŽ		
Agriculture		ı																		
S. Antonio Abad	276	269	7	313	5 06	7	313	307	6	340	334		280	373	1	33	-	55		
5. Luis Gonrege	242	247	5	248	240	8	261	256		270	265		270	265		14	-	23		
del Centro del Perú	167	164	3	178	193	5	196	182		235	223		F88	273		25	-	6		
Agrarie	577	560	8	619	609	9	704	685	10	736	711		695	670	1	97	-	120		
de la Amezonia Peruana	5.7	F.3	3	-	•	-	123	110	4	157	120	8	158	131	7	Ŗ	١-	1		
Técnica del Altiplano	176	173	3	113	118	1	122	120	2	174	172	2	205	505	3	21	-	14		
Técnica de Piura	127	118	۶	133	150	3	196	187	9	550	210	10	234	553	11	41	-	10		
Técnica de Cajamarca	60	62	-	105	101	1	128	124	4	154	140	5	149	144	5	-	-	15		
Agrarie del Norte	132	131	1	151	150	1	3 83	3 75	8	345	53 8	7	166	163	3	60	-	85		
Heimilio Valditán	68	65	3	73	87	6	93	89	4	105	30	6	108	102	6	1	-	4		
Agraria de la Selva	-	-	-	35	53	2	52	49	3	70	66	A	171	162	٥	-	-	-		
P.U. Católica del Perú	253	247	6	170	163	7	150	145	5	179	171	7	192	181	11	-	-	26		
Agriculture (Ingenieria egricola)																				
Agraria	213	209	A	281	276	5	470	473	6	517	506	11	518	508	10	21	-	18		
Animal Humbandry																				
del Centro del Perú	41	8າ	1,	79	75	1 -	76	75	1 -	101	ود	1	135	154	i	5	i -			
Agrerie	316	307	9	333	326	7	425	413	12	434	416	"-	435	410	*	40	-	31		
Agrerie del Norte	-	-	•	-	- '	-	-	-	-	17	17	-	30	30	-	-	-	-		
Veterinary Science	}												-60							
Mayor de S. Marco	252	520	1	255	243	1	253	242	1	270	252	L	268	250	ı	30	-	30		
S. Luis Conrege	107	100	7	91	89	5	91	89	2	122	119	1	134	131	3	10	-	8		
Técnice del Altipleno	27	27	-	57	56	1	85	85	3	108	104	*	116	114	5	8	-	7		
de Lembeyeque	-	-	-	26	23	3	59	55	*	98	88	0.0	123	110	113	11	-	9		
Forestry	1													0.						
del Centro del Perú	32	35	-	24	25	1	31	29	2	7,1	64	7	93	84	9	11	-	2		
Agrario	13	12	1	24	55	2	41	**	1	46	45	1	60	57	3	5	-	5		
	3,109	3,053	76	5,349	, 263	86	1,251	1,134	117	1,748	, 571	1.77	,908	707	201	441	,	455		

^{*} The only two agricultural universities are: U.N. Agraria and U.N. Agraria de la Selva; the other universities have faculties for the different specialisations.

^{1/} Bachilleres

^{2/} Doctores

^{3/} Titulados

A/ Agriculture and animal husbandry (combined study).

^{2/} Agriculture and forestry (combined study).

^{6/} Now merged with the U.N. de Lembayeque under the new name of U.N. Pedro Ruis Gello.

Source : Prepared by the Mission.

TOTAL ENROLMENTS OF FISHERY STUDENTS IN THE DIFFERENT UNIVERSITIES, 1960-1968

University	19€0	1961	1962	19€3	1964	1965	1966	1967	1968
Universidad San Luis Gonzaga Universidad del Centro del Perú Universidad Agraria Universidad Federico Villarreal Universidad Técnica del Callao Universidad José F. Sánchez Carrió (Huacho)	66	19 - - -	34 36 - 125 -	34 39 - 219 -	57 68 - 256 -	56 67 262 -	61 81 245	79 - 44 220 49 90	86 - 56 182 80
	6 6	19	195	292	381	385	387	482	528

ACADEMIC PROGRAMMES BY UNIVERSITY AND TITLES GRANTED

Courses for Fishery Engineers	University	Diploma
Fishery engineering	Universidad San Luis Gonzaga	Fishery Engineer
Fishery engineering	Universidad Agraria	Fishery Engineer
Fishery engineering, oceanography and hydrobiology	Universidad Federico Villarreal	Fishery Engineer in cceanography and hydrobiology
Fishery Technology	Universidad Federico Villarreal	Fishery Technician
Hydrobiological resources and fishery	Universidad Técnica del Callao	Fishery Engineer
Pishery engineering	Universidad José F. Sánchez Carrión (Huacho)	Pishery Engineer

Source: CONUP

PRIVATE POST-SECONDARY PROFESSIONAL SCHOOLS - LIMA AND PROVINCES - 1970

name and location of school	Journalism	Business Administration	interior Desoration	Tour 1sm	Public and/or Industrial Relations	Mursing	Technology	Paychoformation Techniques	All Totals
ALL TOTALS	550	1,933	126	502	557	436	42	154	3,970
LIMA AND SUBURBS Total	220	1,813	126	502	267	436	42	154	3,560
- High Institute of Journalism "Bausata and Mesa" (Lima and Callao) - High Institute of Administration and Technology - High Institute of Business Administration and - Marketing - Technical Institute of Business Administration - High Institute of Psychoformation - School of Interior Decoration of Miraflores - High School of Tourism of Peru - National School of Tourism - High School of Public Relations - School for Nurses "San Filipe" - School for Nurses of the Workers Social Security Fund - School for Nurses of "Arzobispo Leayza" Hospital - School for Nurses of Childrens Hospital - High Private Technical Institute "Montemar"	220	435 1,066 312	126	236 266	267	87 139 105 105	42	154	
PROVINCES Total	Ŀ	120	-	_	290	1-	<u> </u> -	<u> -</u>	410
- Technological School of Business Administration "San Juan" Sullana, Piura - School for Public and Industrial Relations, Chiclayo		120			235 55				

Bource: Ministerio de Educación - Dirección General de Educación Profesional

SENATI ACTIVITIES FROM 1963 - 1970

PROGRAMMES	1963	1964	1965	1966	1967	1968	1969	1970	TOTAL
Apprenticeship	_	-	_	332	377	745	976	1,547	3,977
Promotion of training	-	-	75	76	143	86	89	496	965
Improvement of workers	-	-	-	70	258	1,025	3,026	4,881	9,260
Training within industry	-	-	775	2,684	2,840	813	6,117	8,739	20,968
Complementary schooling for workers	859	5,225	5,311	1,605	1,,742	2,029	4,202	7,046	28,019
Formation and improvement of instructors	170	45	2	58	7	322	470	188	1,262
Formation of monitors	-	-	_	-	_	71	_	74	145
Selection of apprentices	-	- -	-	-	-	-	747	1,501	2,248
TOTAL	1,029	5,270	6,163	4,825	5,367	5,091	14,627	24,472	66,844

Source: Data produced by SENATI (Servicio Nacional de Aprendizaje y Trabajo Industrial).

1970-1980
ENROLMENT TARGETS BY PUPLIC AND PRIVATE SYSTEMS (thousands)

						. 1					· · · · · ·			
Levels		1970	1971	1972	1973	1974	1975	1976	1977	1978	1980	Aimual	wth Rate	
												70/75	Annual 70/80	Total 70/80
Pro- primary	Total Public	86 63	<u>91</u> 63	111 77	143 105	17 <u>1</u> 125	196 143	212 156	228 166	245 178	232 206	1.178	1.130	3.28
Pagic Ed. 1/6 (Primary	Priv. Total Regul. Labor.	2,484 2,484 180	28 2,552 2,552	3,078 2,729	40 3,230 2,873	171 125 46 3,349 2,971	3,405 3,004	3,466 3,040	5,498 3,0:1	5,542 3,041	76 3,6 <u>18</u> 3,0 2	1.050	1.031	1.36
Basic Ed. 7/9 (Sec. 1-3)	Public Priv. Total Regal. Labor. Public	2,302 362 544 398 146	389 2,547 375 2,547 375 375 375 375 375 375 375 375 375 37	349 2,672 451 176 176 522	257 2,809 421 682 500 182 585	778 2,914 435 745 547 198 639	2,962 441 813 595 27	426 3,019 447 890 654 236 763	457 3,055 448 990 743 247	501 3,091 451 1,136 851 285	576 3,163 455 1,514 1,127 337	<u>1.085</u>	<u>1.108</u>	<u>2.79</u>
Higher Ed. 10/12 (Sec. 4-	Priv. Total	82 130	95, 137 ² 107 30	105 145 114 31	97 158 ² / 125 33	106 182 144 78	703 115 216 ⁸ 171 45	127 246 195 51	851 139 _b 39 <u>0</u> b 308 82	977 159 <u>426</u> 337 89	1,304 210,5 579 458 121	1.107	1.161	4.45
Higher Ed. 13/16	Total Public Priv.	1 <u>26⁰</u> 101 25	1 <u>37[©]/</u> 113 24	149 ^c / 123 26	1 <u>62[©]/</u> 133 29	182 [©] / 149 33	205 ⁹ / 167 38	235 [©] / 191 45	159 ^d / 128 31	171 ^d / 137 34	196 ² 157 39	1.102	1.045	1.55
Worker Training	Total Public Priv.	<u>36</u> 33 3	<u>44</u> 40 4	54 49 5	59 55 4	65 60 5	72 67 5	80 73 7	88 81 7	9 <u>7</u> 89 8	119 109 10	1.149	1.127	3.31
Special ZC.	Total Public Priv.	4.4	3.7 2.8 0.9	3.7 2.8 0.9	3.8 2.9 0.9	4.4 3.5 0.9	4.5 3.6 0.9	4.6 3.7 0.9	4.7 3.8 0.9	4.9 3.9 1.0	5.2 5.0 1.2	1.001	1.017	1.18

Source: Educational Plan 1971-5 Notes: a/ For the period 70-76, grades 10-11 are included here.

b/ From 1977 onwards, grades 10-12 are included here.

c/ Until 1976, grades 12-16 are included here.

d/ From 1977 onwards, grades 13-16 are included here.

EVOLUTION IN THE PARTICIPATION OF THE PRIVATE SECTOR IN EDUCATION (DAY AND EVENING) (PERCENTAGES)

	1963	1964	1965	1966	1967	1968	1969	1970 1/
Pre-Primary	26.7	24.1	26.3	27 0	26.0	26.1	n a.	26.7
Primary (1-6)	18.1	18.4	17.7	19.5	18.9	14.0	n.a	13 6
Secondary General (7-11)	36.7	26.1	23.7	20.6	19.0	n a.	na.	n.a.
Grades 7-9	-	-	-	-	-		-	15.1
Secondary Industrial (7-11)	3.0	2.8	2 5	2.7	2.8	n.a.	n.a.	n.a.
Secondary Commer- cial (7-11)	25.0	18.3	28.9	11.7	11.8	n.a.	n a.	n.a.
Secondary Agri- cultural(7-11)	-	-	-	•	-	~	•	•
Grades 10-12	-	-	-	•	-	-	-	21.5
Intermediate (12-14)	-	-	•	-	••	-	-	•
Teacher Training (12-15)	21.3	38.5	40.8	33 .9	25.0	20.7	na	n.a.
University	14.1	12.7	16.3	18.6	20.9	21.6	23.2	n.a.
Grades 15-16	-	-	-	~	-	-	-	19.8

Note: 1/ Taken from the Plan.

Source: Proyecciones, División Estadísticas Educativas

NUMBER OF TEACHERS BY SEX, QUALIFICATION, LEVEL AND TYPE OF EDUCATION (PUBLIC AND PRIVATE) 1970

	Primary			General Secondary			7	Teacher Training				
	Total	M	P	Total	М	P	Total	М	F	Total	М	P
lst category	35.357	13,228	22,129	12,554	6,747	5,807	2,715	1,432	1,283	821	491	330
2nd category	3,755	1,582	2,173	5,800	1,708	1,092	1,289	823	466	96	74	55
3rd category	24,218	8,279	15,937	5,959	3,702	2,257	5,212	1,412	800	139	107	32
Unspecified	674	249	1125	550	333	217	117	72	45	19	12	7
Total	64,004	23,338	40,666	21,863	12,490	9.373	6,333	3.739	2,594	1,075	604	391

Note: 1st category means staff with professional teaching qualification.

2nd category means staff without professional teaching qualification but with other professional qualification.

3rd category means staff without teaching or other professional qualification.

Source: Censo Macional Escolar 1970; División de Estadisticas Escolares.

EVOLUTION OF THE TEACHING STAFF, 1963-1970

	1963	1964	1965	1966	1967	1968
Total	99,874	91,223	96,663	105,502	114,344	118,367
Pre-primary and Day Primary	46,788	50,290	54,528	58,909	63,013	65,241
Evening Primary	1,617	2,372	2,782	3,507	3,831	4,061
Day General Secondary	11,733	14,349	16,724	18,801	20,835	21,055
Evening General Secondary	1,277	1,694	2,227	3 . 642	4,298	4,303
Agricultural Secondary	602	817	957	1,148	1,345	1,407
Industrial Secondary	2,285	2,760	2,955	3,0 05	3,384	3,514
Day Commerce Secondary	1,887	1,693	1,706	1,788	1,977	2,013
Evening Commerce Secondary	599	820	1,296	1,357	1,465	1,605
Intermediate Education	-	-	-	145	153	223
Teacher Training	818	1,229	1,454	1,864	2,001	2,193
University	5,450	6,193	7,125	8,474	9,632	10,303
Literacy Programmes	26,410	8,324	4,134	1,833	1,228	1,154
Artisanal Training	140	293	441	518	691	770
Skilled Worker Training	260	339	354	431	490	525

Note: Teachers working at several schools are double counted

Source: Diagnostico del Sistema Educativo, Ministerio de Educación, 1969

EMPOLMENT OF TRACHER TRAINING COLLEGES BY CHARLES, SPECIALIZATION, ADMINISTRATIVE LEPENDENCY

Major Speciali-	Administrative		1,968				Total	
sation Area	Dependency	1st Oracle	2nd Grade	3rd Grade	4th Grado	Public	Private	Municipal
Pre-primary	Public	40	48	43	38	169	-	•
	Private	-	-	•	-	-	÷	-
	Municipal	•		•	-0	-	-	-
Total.	169	40	48	43	3 8	-	-	•
Primary	Public	2,945	2,119	2,424	2,552	10,040		•
	Private	861	618 '	820	1,005	-	3,304	-
	Municipal	1,113	452	473 ·	527	-	-	2,565
Total	15,909	4,919	3,189	3,717	4,084	-	-	-
Secondary	Public Public	1/	944	923	544	2,411	_	-
General	Private	7/	295	923 362 429	117	-	774	-
س والبيوسية	Municipal	1 /	1,019	429	225	1 -	-	1,673
. Total	4,858	-	2,258	1,714	886	-	-	-
Seconiary	Public	<u>1</u> /	52	63	28	143	_	_
rechnical	Private	-			1			_
عبدت المنتدن	Municipal	1/	85	30		i - 1	-	113
Total	256	-	135	30 93	28	-	-	-
Grand Total	21,192	4,959	5,630	5,567	5,036	12,763	4,078	4,351

Note: 1 included in the 1st grade for primary school teacher training.

Source : Dirección Formación Magisterial.

SAMPLE DISTRIBUTION OF PUPILS BY AREAS OF SPECIALIZATION IN TEACHER TRAINING CENTRES, 1968-1971

	1963	1969	1970	1971
Total Enrolment	12,763	12,065	14,437	11,904
Total Graduates	3,162	3,027	1,563	3.971
lst grade enrolment (common)	2,985	2,546	2,899	2,510
Total primary enrolment (2-4)	7,224	6,283	5,889	
Total primary graduates	2,590	2,233	2,500	1,9202/
Total general secondary enrolment	ł .	ţ.		:
(2-4)	2,411	2,945	5,137	- 2/
Total general secondary graduates:	544	743	1,936	1,0962/
Biology and chemistry	154	376	575	505
Mathematics and physics	119	154	413	459
Spanish and literature	-	80	3,8	374
History and geography	61	98	267	238
Philosophy and Social Science	88	3 5	180	177
Spanish & literature & philos.	84	-	<i>3</i> 9	7
Philosophy and religion	14	-	رَ ع	- 1
English	24	-	10	10
Physical education Total technical secondary envoluent	-	-	71	76
(2-1/)	145	cor	512	3
Total technical secondary graduates:	20	291	127	7552/
Home economics	15	51 9	54	122
General mechanics	4	7	9	155 ² / 68 6
Automechanics	6	10	6	12
Voodwork		7	6	
Technical drawing	_	_ '	4	
Agriculture	3	14		8
Industrial arts		-	3 26	44
Electricity	-	4	12	4
Radio and television	-	_]	7	7
Building and construction	-	-	-	6

Covers most of the public Teacher Training Centres; however, the data are always incomplete and not totally reliable.

Source: Dirección Formación Magisterial y Planificación Sectorial

^{2/} Estimates on the basis of last years enrolment.

UNIVERSITIES TRAINING TRACHERS FOR SECONDARY TECHNICAL SCHOOLS (1968)

UNIVERSITIES	SPECIALITY	ENROLMENT			
CALICAGINU	SPECIALITY	Total	Men	Women	
1. State University "San Antonio CU2CO	Commercial Secondary Education	36	23	13	
2. Private University "Inca Garcilazo de la Vega"	Commercial Secondary Education	279	249	30	
3. Netional University of Education Enrique Guzmán y Valle"	Technical Secondary Education	156	151	5	
	ALL TOTALS	471	423	48	

HIGHER INSTITUTES FOR TECHNICAL EDUCATION (INTERMEDIATE EDUCATION) ALSO:PROVIDING TECHNICAL TEACHERS

- 1. Regional College of "Chimbote"
- 2. Co-educational Technological Institute "José Pardo", Lima (industrial)
- 5. Industrial Institute "República Argentina", Lima (in administration)
- 4. High Technical Institute of Canate (agricultural)
- 5. High Technical Institute of Chincha 'agricultural)
- 6. Institute for Interior Decoration
- 7. High Institute of Cosmetièsav
- 8. Section of Business Administration at "Meleton Carbajal"
- 9. Regional College of Teona 'mining, mechanics, cooperatives, tourism and administration
- 10. School for Agricultural Technicians, Tacna 'home economics, agricultural extension)
- 11. School for Agricultural Technicians, Urubamba
- 12. School for Agricultural Technicians, Huancayo
- 13. Regional College, Tacna 'administration, mechanics, agriculture, cooperative
- 14. High Technical Institute, Andahuaylas (agriculture, administration)

Source: Ministerio de Educación - Dirección General de Educación Profesional

EVOLUTION OF THE TEACHER TRAINING INSTITUTIONS, PUBLIC AND PRIVATE 1965-1970

		Teacher Train	ing College	2/	Universit	les' Department	t of Education
Year	Enrolment	No of T.T. Centres	Entrants	Graduates	Enrolment	No of Departments	Graduates
1965	14,673	95	6,136	2,416	23,730	15	2,625
1966	16,512	102	6,192	4,539	26,505	17	3,020
1967	14,531	109	4,619	9371	29,119	20	3,445
1968	16,841	96	3,846	3.956	31,953	22	n.a.
1969	15,634	88	2,655	4,774	22,926	30	n.a.
1970	16,208	94	3,038	5.356	34,219	30	4,587

^{1/} There was no graduation of primary school teachers, because the course was prolonged by one year as from then. The 987 graduates were secondary school teachers.

Source: Proyecto ESEPS, 1971

^{2/} These figures do not include the Municipal Teacher Training Centres (which for 1968 for example had about 4,500 pupils) or the Centres for Family Education, Physical Education and for Arts (which in the same year had about 3,445 pupils).

DISTRIBUTION OF THE ENROIMENT BY AREAS OF SPECIALIZATION IN UNIVERSITIES' DEPARTMENTS OF EDUCATION, 1960-1968

	1960	1961	1962	1963	1964	1965	1966	1967	1968
Total Enrolment	6,301	7,674	10,565	13,138	17.565	23,730	26,505	29,119	31,953
Basic Cycle 1	1,255	1,323	1,328	1,640	2,231	3,651	3,855	4,601	5,392
Primary Education	701	722	788	1,149	1,381	2,241	2,361	2,126	2,786
General Secondary Education	4,274	5,463	8,255	10,128	13,700	17,231	19,778	21,924	23,327
Commercial Secondary Education	-	-		_	-	279	322	416	426
Technical Secondary Education	-	-	-	-	-	-	_	156	381
Arts Education	16	18	51	28	35	31	47	55	56
Religious Education	23	28	30	45	65	46			-
Family Education	112	120	143	148	153	156	167	103	70
Physical Education	_	-	-	-	-	330	297	310	322

^{1/} This is not a specialization, but covers the common preparatory course before specialization offered in some universities.

Source: CONUP, Dirección de Planificación, Boletin Estadístico No 4, 1970

TECHNICAL TEACHER TRAINING CENTRES - 1970

NAME OF CENTRE AND LOCATION	SPECIALITY	ENROLMEN!
LIMA AND SUBURBS		170
 National Pedagogical Institute for Women, Monterrico 	Women's Industrial Arts	25
Co-educational High Normal School of Brena	Industrial Arts	144
FIRST REGION		<u>30</u>
3. High Normal School for Women, Sullana	Women's Industrial Arts	30
SEVENTH PEGION		<u>156</u>
4. High Formal School for Vomen, Puno	Women's Industrial Arts	81
5. High Normal School for Men, Puno	General Mechanics 28 Electricity 3' Agriculture 22 Cerpentry 11 Petrol Engines 11	75
EIGHIH PEGION		157
6. Co-educational High Normal School of Trujillo	General Mechanics 13 Electricity 13 Carpentry 13 Radio and TV 26 Professional Drawing 4 Construction 6 Cutting and 35 Dressmaking Home Sciences 47	·
	ALL TOTAL	513

Source: Ministerio de Educación

GENERAL SECONDARY SCHOOL CURRICULUM (DAY SCHOOLS - 1964/1965 REGULATIONS)

	Besi	e Common C	ycle	Upp	or Di	ffore	ntiat	ed Cy	cle	Percentages ov	er the 5 years
	lst year	2nd year	3rd year	4t)	ı year	r	51	th yea	ar	Sciences	Humanities
				Com.	Hum.	301.	Com.	Hum.	Sci.	Course	Course
Spanish	5	4	. 4	4	4	-	2	3	-	10.0	13.7
History	5	5	6	3	*	-	-	3	-	10.0	13.7
Geography	· 4	3	-	-	-	-	-	4	-	3.7	5.6
Civios	-	-	-	-	-	-	2	-	-	1.0	1.0
Political Econor	ry -	-	-	-	-	-	3	-	-	11.6	1.6
Philosophy and Psychology	•	-	-	2	-	-	5	-	-	5.7	3.7
Religion	1	1	1	1	-	-	1	- '	-	2.6	2.6
Mathematics	5	4	4	4		4	-	-	4	13.2	9.0
Exact Sciences	-	-	3	-	-	6	-	-	6	7.9	1.6
Natural Sciences	, B -	3	3	-	-	4	-	-	-	5.3	3.2
Foreign Lenguage	8 3	3	3	3	-	-	3] -	-	7.9	7.9
Arts Education	5	2	2	2	-	-	2	-	-	5.3	5.3
Physical Educat	ion 2	2	5	2	} -	-	2	-	-	5.3	5.3
Pre-military Instruction/ Family Education	, ,	5	2	5	-	-	2	-	-	5.3	5.3
Educational Guidance	1	1	1	1	-	_`	1	-		2.6	2.6
Supermised Stud Various Ed. Act		8	7 .	-	6		-	5	5	14.6	17.9
Totall	38	38	38	24	14	14	23	15	15	100.0	100.0

Source: Ministerio de Educación - La Educación en el Porú. 1/ From 1969 on slight readjustment on the besis of

PIAN OF STUDIES TECHNICAL SECONDARY EDUCATION FOR MEN DAY-TIME - 1971

	Bas	ic Cy	cle	Technic	al Cycle
Courses	lst	2nd	3rd	4th	5th
Mathematics Natural Sciences Applied Physics Applied Chemistry Language and Literature History of Peru Universal History Geography of Peru and the World Civics Foreign Language Political Economy Labour Laws Workshop Organization Technical Drawing Technology Workshop Practice Physical Training Arts Education Orientation of the Student Directed Studies Pre-Military Instruction	4 32 - 3 - 2 22 14 2 1 1 - 22	42 3211 - 1 2212 - 22	32 331 - 12 22421 22	4 - 22 22 - 22 34 2 - 1 1 2 2	4 - 22 - 1 - 2 - 2 - 2 - 2 - 3 - 2 - 1 - 3 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2
Religion Weekly hours	40	40	40	41	41

Source: Ministerio de Educación, Dirección General de Educación Profesional

PIAN OF STUDIES TECHNICAL (ROME ECONOMICS) SECONDARY EDUCATION FOR WOMEN, DAYTIME - 1971

Courses		sic Cy		Technica	
	lst	2nd	3rd	4th	5th
Language and Literature	5	4	4.	2	2
Mathematics	5	4	4	! -	-
Foreign Language	5	2	2	2	2
History of Peru	3 2	3 2 3	4		-
Universal History		2	2] -	-
Peruvian and World Geography	4	3	-	-	-
Zoology and Botany	-	3	-	-	-
Anatomy, Physiology and Hygiene	-	-	3	- 1	-
Elements of Physics and Chemistry	-	-	3 2	- 1	-
Civics	-	-	2	-	-
Religion	1	1	1 -	1	1
Arts education (Drawing 2, Music 1)	3 6	3 6	3 6	-	-
Technical and Vocational Initiation		6	6	-	-
Physical Training	2	2	2	2	2
Family Education	3	4	2	-	-
Student's Orientation	1	1	1	-	-
Educational Activities and Directed Studies	1	1	-	-	-
Applied Arithmetic	- 1	-	-	3	2
Applied Physics and Chemistry	-	-	-	2	2
Political Economy	1	-	-	2	-
Psychology	- 1	-	-	-	2
Home and Family Education	-	-	-	3 2	3 2
Professional Drawing	-	-	-	2	2
Labour Laws	-	-	- !	- [ı
Organization and Administration of Workshops	-	-	-	1	-
Accounting	- 1	- 1	-	-	1
Technology and Practice of the Speciality	-		-	18	18
Professional Orientation	-	-	-	1	1
Weekly hours	39	39	39	39	39

Source: Ministerio de Educación, Dirección General de Educación Profesional

PLAN OF STUDIES COMMERCIAL SECONDARY EDUCATION, DAY-TIME

1971

	T				Te	chnica	1 C3	rcle		
Courses	Bas	ic Cy	cle		nting	Comm	erce	Secretarial- Correspondence		
	lst	2nd	3rd	4th	5th	4th	5th	4th	5th	
	Γ,	,	7						_	
Language, Literature	3	3	3	-	_		_		_	
Mathematics			•	_ '			-]	_	
Foreign language	3	3.	3 2				_		_	
History of Peru		5	2	- :	-					
Universal History	-	5	(-	-	-] ~	-	_	
Geography	3	2	! -	-	-	-	-			
Civics	-	-	1	-	-	,	- 1	ī	ī	
Religion	1	1	1	1 2	1 2	1 2	5	2	2	
Physical training	2	2.	2	2	2	ے .	ے ا		_	
Pre-Military Instruction/	1 .		i _					2	2	
Family education	2	2	2	2	2	, 2	2	-		
Commercial English	-	-	-	3	3	3	3	3	2	
Psychology of business	-	-	-	3	- 1	3	_	3	2	
Statistics	-	-	-	-	3	-	3 3	-	3 3 3 3 2	
Business org. & admin.	-	-	-	-	3	-		_	2	
Commercial corresp.	-	-	-	3 2	-	3	-	3 2	2	
Labour Laws	-	-	-		-	2	-	3	-	
Political economy	-	-	-	3	-	3	~	3 2	-	
Comm. & Ind. geography	-	-	-	2	-	2	`-		-	
Commercial Mathematics	-	-	-	4	3	4	-	4	-	
Comm. & taxation laws	- '	- 1	-	-	2	-	2	-	-	
Private financing	-	-	-	-	2	-	2	-	2	
Accounting	4	4	4	4	4	4	-	-	_	
Calligraphy	2	-	-	-	-	-	-	-	-	
Commerce & documentation	3	2	-	-	-	-	•	-	•	
Commercial drawing	-	-	2	i -	-	-	-	-	-	
Shorthand	-	2	3	-	-	-	-	-	-	
Typing	4	4	4	-	-	-	-	-	6	
Elective courses	-	-	-	6	6	6	6	6	6	
Professional practice	-	-	- '	2	3	2	3 2	-	3	
Selling techniques	-	-	-	-	-	2	2	-	-	
Marketing	-	-	-	-	-	-	3	-	-	
Secretarial techniques	_	-	_	-	-	-	-	4	-	
Directed study	5	5	4	-	-	-	-	-	-	
Weekly hours	38	3 3	38	37	34	39	32	35	3 0	

	ELECTIVE COURSES (Maximum two)	4th year	5th year
a) c) d)	Organization of Cooperatives Calculating machines Bank organization & practice Shorthand (intensive courses)	3 hours 3 " 3 " 3 "	- 5 hours
e)	Industrial costs practice Publicity and advertising	-	3

Source: Ministerio de Educación, Dirección General de Educación Profesional

CURRICULUM OF THE SECONDARY ANIMAL HUSBANDRY SCHOOLS

Out took			Ве Х	tudy		
Subject	•	lst	2md	3rd	4th	5th
Spanish Language/Literature		3 .	3	3	2	_
Mathematics		4	3	4	3	3
History of Peru	1	2	2	3	-	-
World History	į	-	2	2	-	-
Geography	1	3	2	-	-	-
Botany	1	2	-	-	-	-
Zoology	1	~	3	-	-	~
Anatomy, Human Physiology	1	-	-	3	-	-
Foreign Language)	· 2	2	2	-	-
Civios	1	-	-	ı	-	-
Religion	•	1	1	1	-	-
Artistic Expression	j	1	. 1	1	-	-
Political Education	ļ	-	-	-	1	-
Psychology, Logic, Ethics	ĺ	-	-	-	-	2
Physics	Į	•	-	-	2	2
Chemistry	- [-	-	-	3	3
Biology		-	-	-	2	
Geology	Ì	•	-	-	-	1
Physical Education	1	2	2	2	2	2
Pre-military Instruction	1	2	2	2	2	2
Educational Guidance	1	, 2	2	1	2	1
	1	_				_
Total		24	25	25	19	16
	1	-	_			_
Agricultural Vocational Training		15	14	14	_	_
Rural Administration	ţ	-	-		2	2
Animal Husbandry Mochanics		_	_	-	3	3
Rural Legislation	1	-	_	_	-	3 2
Mirai Degisiation Elective Technical Subjects		_	_	-	_	5
Speciality: Local Animal Husbandry		_	_	_	15	ıí
phonetica , most winest managemia						
Total	1	15	14	14	20	23
TOCAL	1					
GRAND TOTAL	1	39	<i>3</i> 9	<i>3</i> 9	<i>3</i> 9	<i>3</i> 9
WARM TOTAL				_		
I Meteorology 2	Ì					
Hydrology 3	. 1					
T. A A A Tromp. O						
I Agricultural Loans 2	1					
Agricultural Co-	1					
operatives 3	<u>į</u>					

PERCENTAGE COMPOSITION OF THE VARIOUS TEACHER TRAINING COURSES OFFERED IN TEACHER TRAINING COLLEGES (1968) 1

1	سو					4th			
					lst sem	2nd se	of the Wyears		
Training	General Ed. 2/ Prof. Ed. 3/ Teaching Prac.	76.0 24.0	34.0 66.0	26.0 74.0	11.0 80.0	100.0	55.0 52.0 13.0		
Secondary School Teacher Training	General Ed. Prof. Ed3/ Specialication Teaching Prac.	84.0 16.0	40.0 34.0 26.0	24.0 24.0 52.0	11.0 26.0 63.0	- - 100.0	38.0 22.0 27.0 13.0		
Physical Ed. Teacher Training	General Ed. Prof. Ed. Specialization Teaching Prac.		14.0 20-31.0 56-55.0	43.0 57.0	14.0 43.0 43.0	14.0 43.0 43.0	55.0		
Femily Education Teacher Training	General Ed. Prof. Ed. Specialization Teaching Prac.	13.0 19.0 68.0	11.0 21.0 68.0	11.0 24.0 65.0	24.0 76.0	100.0	9.0 19.0 60.0 12.0		

^{1/} From 1969 on the weekly load is 35 periods.

Source: División Formación Magisterial

^{2&#}x27; Includes Revision of all General Subjects.

^{3&#}x27; Includes Philosophy of Education, Curriculum, Administration etc.

CHRONOGRAMME OF THE TRAINING ACTIVITIES OF CENCIRA - 1971

artici- ants	Courses	January Weeks	1	(Vee		H	larch fooks		April Veek	1	140	ay oks		June Weeks	M	uly selts	1	Weeks	1	ptem Week	3	*	tober seits	1	iovembe Weeks	Works	Coun
		1234	1	2	3 4	11	2 3 4	回	2 3	1	12	134	II	234	1 2	13 4	1	234		2 3	1	1 2	13 4	\mathbf{T}	23	11234	1
ĺ	Introduction to the agrarian reform		13	Ц		111175				4	L	Ш	1		1						Ц		Щ	1		4	11
	Research and rural	1	h	Lin			quipe		Tacn	-				hiclayo	7			Jancayo	-	Lim		7	íms A				10
	society			Lin)å	Arı	quipe		Lima	-	L	ma		Cuzco		ma		Lima	С	hicla	yo	L	ima	1	Lime]	
	Agrarian reform projects			Ц				\square		Ц		П	-		1 jan			to be	dec	ided	П	100				}	2
	Law and agratian legislation				I	口	II	口						Ш		Hill			L	П	П	П	П			•	3
ž.	Cultural plans and	£			I		II	\Box		\prod]	ima II	1		Ī	ima				П			П	1	Lima	1	2
hnic	irrigation	15 days	-	~		ļ.,		<u> </u>			-	1-7	4	San Orenzo		, , , , , , , , , , , , , , , , , , , 	\perp		L				7-7-	4	linejane	4	_
and tackniciens	Land survey	1 (1	-	Ш		╁┸		┦	Lima				+				+		╀	Lim		\vdash	11	╁		┦ .	2
	Agricultural enterprises management	a mir					II	口		Ц	\prod	П	1		I	1				П		П	П	1		Tecto	4
Courses for officials	Agricultural credit	CENCIRA - COMACRA seminer		П	I	\Box	II	\Box					1	Lima		ima ∐		Lima	1				\prod	1	Lima	CENCIRAInstructors	4
10] 5	L	, ,		1		1			1.	ima	}	uancayo				Cuzco	C	hid	yo		~ -	1	7-10-10-10-1	S	
Š	Commercialization	IRA.	+			┦	11	╀	LL.	4		<u>L</u> L	+			ima	+		+		1	Н	11	+	Lima	i j	2
	Agricultural extension methods	CEN					\prod		П	П	I	y season 1 -> p		Ш			1			П	\perp			1		Holidays for	4
		, or	-	77		╀╌	-1-1	\downarrow	1 1	+	-3	,ìme			Hu	encey (4	Cuzco	+		_	a	iciayo	4		¥ Ž	-
	Communications	temin.	1	Ш		╁		╀┘	<u> </u>	1		11		Lima	1		\dagger		+	1_1		\vdash		+	111	-{	1
	Land reclamation	Internal seminer of	F				\prod				I	\prod	1		Fee	reflate			-	П	Γ	I	\prod	7		-	1
	Introduction to the	ī -	Ē			100		7	$\overline{\sqcap}$	T	Ŧ	TT	T			TT					T			$\frac{1}{1}$	777	Ħ	
ž r	agrarian reform	_				A	equipa		Tecn	8			1	Chiclayo			Н	naucayo		Lin	 8	1	ima	7		7	} 11
managera 1º leaders	Management training I (for enterprises organization)		-	Lic		A	equipe		Bone	Pi		Lim		Cuzco	I T	ujilo		Lima		Lim			ancay		Lima		11
raes for m farmers' l	Management training II for organized	1						j		M									t				i dadi Leg				11
Cour	unterprises)	4	-	Lin	na 	A	aquipa	1	вспа	Piu	ra	Lim	4	Cuzco	(Indexes	ujilo	4	Lima	1	Lim	1a	Hu	ancay	0	Lima	_	-
	Agricultural technology		+		<u> </u>	╁┦		+		1	Lim	d)			Hu	sncayo	+	Cuzco	-	11		C	iclay		Lima	-	6

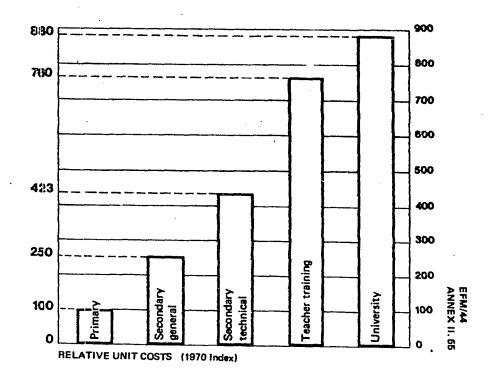
Level and Type of Education	1967	1970	1970 Index
Pre-primary and primary	1 207	1 543	100
General secondary	3 102	3 870	250
Technical secondary	4 807	6 541	423
agricultural `	7 905	8 380	540
commercial	2 547	3 870	. 250
industrial	6 180	8 514	550
Teacher training	11 490	11 765	760
Universities	10 729	13 642 .	083
education	7 224	9 163	591
humanities	7 989	10 133	654
medical	~ 28 921	36 686	2 370
sciences	16 662	21 136	1 365
engineering	24 420	30 964	2 000

Source: Perú, Plan de Desarrollo Economico y Social 1967-1970 Educación

REMUNERATION AS A PERCENTAGE OF PUBLIC ALLOCATIONS FOR EDUCATION

	· · · · · · · · · · · · · · · · · · ·
Primary	96.7
General secondary	92.5
Technical	93.0
Universities	65.0
TOTAL	83.0

RECURRENT UNIT COSTS (IN SOLES 1963)



COMPARATIVE RECURRENT UNIT COSTS (PRIMARY EDUCATION COST - INDEX 100) 1967-70

Level and Type of Education	Uganda	Congo (Brazza)	Algeria	Sommelia	Chile	Senegal	Jordan	Morogeo	India	Ceylon	Turkey	Iran	Rwanda	Tuntsia	Malaysta
Primary	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Intermediate	550	400	-	133	-	370	130	305	150	-	-	- 1	-	 .	135
Secondary General		475	-	600	-	-	-	-	-	-	-	-		-	190
day students	660		270	400	230	-	210	470	290	230	150	135	-	440	-
boarders	980		-	750	-	1,000	-	•		-		_	1,500	_	_
Secondary Industrial	3,700	1,600	570	-	420	7	65 0	480	770	-	-	-	-	-	1,418
Secondary Agricultural	3,200	-	500	-	-	-	1,300	1,900	-	-	-	-	-	-	2,800
Teacher train- ing (secondary level)	3,300	3,000	1,145	-	740	-	-		-	-	-	-	-	-	642
Higher Ed.	7,330	-	1,000	2,000	2,700	1,760	1,450	-	2,160	-	-	-	-	-	2,665
humanities	-	-	-	-	-	-	-	750	-	-	-	-	-	-	-
sciences	-	-	· ·	-	-		-	3,530	-	-	_	-	-	-	-

Source: Unesco