



## PROJECT "REOPENING AND REPARING PLAYGROUP CENTERS AND NURSERY SCHOOLS AFFECTED BY THE EARTHQUAKE AND TSUNAMI OCCURED ON THE 27TH FEBRUARY 2010"

March 2010 SANTIAGO DE CHILE Alonso Ovalle 1180, Phone (02) 7075100 www.integra.cl

## Summary

INTEGRA Foundation is a non-profit private law institution. Its mission is to achieve integral development of boys and girls in situation of poverty and social vulnerability.

Due to the earthquake and tsunami occurred on the 27<sup>th</sup> February 2010, the capacity of assistance was affected in the 634 building that look alter 47.353 boys and girls. From these centres, 70 have their infrastructure collapsed and with severe damage.

This project sets in first priority the reconstruction and repairing of 31 centres situated in the O'Higgins, Maule, Biobío, Araucanía and Metropolitan regions. It considers a total investment of US\$ 3.791.816 during an execution process of 12 months and with an assessment of results which will take place 20 month after its beginning.

The objective is to recover the support services to 2.894 boys and girls in accordance with current institutional and legal standards for early childhood education in Chile.

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#### 1. GENERAL INFORMATION INTEGRA FOUNDATION

INTEGRA Foundation is a non-profit private law institution, which president is First Lady, Mrs. Cecilia Morel and which Executive Director is Mr. Sergio Dominguez. It is part of an active part of the Integral Protection to Childhood System: Chile Crece Contigo [Chile grows with you] and the execution of public policies in education and childhood.

The mission of the Foundation is to "Achieve an integral development of boys and girls aged between 3 months and 5 years who live in poverty or social vulnerability, through an educational program of excellence, which includes families and communities and boosts the rights of the child within a context of democratic living".

The institutional mission is achieved through the offer of 4 strategic products which represent the organisation's activities and its contribution to development and social justice:

- ➤ Early childhood education through playgroup centres and nursery schools of direct management.
- ➤ Early childhood education through playgroup centres and nursery schools managed by a third party.
- ➤ The offer of non conventional modalities of assistance for boys and girls who, according to their necessities, do not need or cannot have access to a traditional offer of playgroup centres and nursery schools' services.
- Telephone orientation service Fonoinfancia. It provides a free and confidential orientation and assistance service over the phone to families, educational agents and community.

According to 2009 results of the Perfil de Logros Aprendizajes de la Educación parvularia (PLAEP) [Profile of Learning Achievements in Early Childhood Education] -the only standardise instrument in the country which assesses learning based on the Bases Curriculares de la Educación Parvularia <sup>1</sup>[Curriculum Basis in Early childhood education] - the 82.7% of children who attend to institutional centres belonging to INTEGRA Foundation, achieve learning levels which are within or over expectation.

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<sup>&</sup>lt;sup>1</sup> INTEGRA Foundation (2010): "Resultados PLAEP 2009". Chile.

In the satisfaction survey conducted in 2009, among the user families of INTEGRA Foundation, entrusted to the company SUR Profesionales Consultores<sup>2</sup>, 97% of the studied families considered that the service delivered met their needs and their children's needs.

The characteristics they most value are that the Foundation is effective when achieving learning boys and girls need (98%) and it provides appropriate food (99%). Also, they are satisfied by the fulfilment of the institutional centres regarding rules and working hours (97%) and the communicational means with users families (96%).

#### **Coverage and Focalisation:**

In order to make the institutional mission possible, the Foundation by 2009 has a permanent staff of 12,864 workers. 93.7% of them work in playgroup centres and nursery schools and the other 6.3% work in Regional Directions and at the National Direction.

INTEGRA Foundation contributes to early childhood coverage because of its presence in all 15 regions of the country and through playgroup centres and nursery schools -managed directly and by a third party- which provided assistance to 72,533 boys and girls during 2009<sup>3</sup>.

From the total amount of institutional centres belonging to INTEGRA Foundation accounted by December 2009: 540 corresponded to playgroup centres and nursery schools, 353 corresponded to playgroup centres only and 101 to nursery schools only.

Analysing the main results of institutional focus for the period 2006-2009, it is proved that the coverage of children belonging to the 2 lowest income quintiles has remained over the 90% and that, as an average, 44% of them are working mothers and 33.3% are heads of families (one third of the total).

In the same way, there is a notorious increase in the focus on children of teenage mothers, unemployed mothers or those looking for a job for the first time, and children who are beneficiaries of the Chile Solidario [Supportive Chile] program (program focused on families in situation of extreme poverty).

Having said this, the available statistics confirm the efficacy of INTEGRA as an instrument focused in public policy, providing early childhood education service to the part of the population who most needs it.

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<sup>&</sup>lt;sup>2</sup> Sur Profesionales Consultores (2010): "Informe final estudio satisfacción familias usuarias de Fundación INTEGRA" [Final Report Satisfaction surveys of families users of INTEGRA Foundation]. Chile

<sup>&</sup>lt;sup>3</sup> INTEGRA Foundation (Marzo 2010): "Balance de Gestión Integral 2009". Chile.

Chart N°1
Main results of institutional focalisation, 2006 - 2009
(Percentages)

Range of Focalisation	2006	2007	2008	2009
Children belonging to the 2 lowest income quintiles	92,6%	91,1%	92,8%	91%
Female heads of household	34,9%	32,5%	32,2%	33,4%
Working mothers	42%	43,9%	45,3%	43,9%
Teenage mothers (at the time of the child birth)	11,5%	12,6%	22,6%	22,5%
Mother who are students	n/i	12,1%	10%	10,9%
Unemployed mother or those looking for a job	29,9%	31,8%	32,8%	34,2%
Children belonging to the program Chile Solidario <sup>4</sup>	10,9%	11,6%	14%	16,1%

Source: Digitalisation of registering records, INTEGRA Foundation, Years 2006-2009

#### 2. PROBLEM AND CORNERSTONE

#### **Description Earthquake and Tsunami:**

The earthquake on 27<sup>th</sup> February 2010 occurred at 03:34:17 local time (UTC-3), and it reached a magnitude of 8,8 MW. The epicentre was located in the ocean, in front of Curanipe and Cobquecura's coasts, about 150 km to the north of Concepcion, 63 kilometres southwest of Cauquenes and 47.4 kilometres under the earth crust.

It was perceived in a large area in the south cone with different intensities, from Ica in Peru to the North to Buenos Aires and Sao Paulo to the east.

The most affected areas due to the earthquake were the regions of Valparaiso, Metropolitan of Santiago, O'Higgins, Maule, Biobío and La Araucanía, which all gather more than 13 millions of inhabitants, close to 80% of the country's total population.

Close to 500 thousand houses present severe damage and a total of 2 million of affected people has been registered, in the worst natural tragedy experienced in Chile since 1960.

<sup>4</sup> The Chile Solidario program focuses in families facing situations of extreme poverty. It takes part of the system of social protection, which involves different sectors.

As a result of the earthquake, a strong tsunami hit Chilean coasts, destroying several villages already devastated by the seismic event. The tsunami alert generated for the Pacific Ocean was later extended to 53 countries along great part of the basin, reaching Peru, Equator, Colombia, Panama, Costa Rica, Nicaragua, the Antarctica, New Zealand, French Polynesia and the coasts of Hawaii.

The earthquake is considered the second strongest in the history of the country and one of the five strongest ones registered by human kind. At a national level, only the cataclysm occurred in Valdivia in 1960 is situated before it, the highest in intensity registered by man through seismometers. The Chilean seismic event was 31 times strongest and released 178 times more energy that Haiti devastating earthquake occurred a month before this one.

#### Characterisation and quantification of damages in INTEGRA Foundation:

In the zone affected by the earthquake and tsunami, INTEGRA has coverage of 47.353 (December, 2009), which represents 71% of the Foundation's coverage. The personnel amounts 8.444 workers.

This area has a total of 634 centres, from which 426 suffered damages of different severity. From these, 56 are affected by severe damages and 14 collapsed. Some of the latest were affected by the earthquake and then swiped out by the tsunami which hit an important part of that area.

Regarding workers, many lost their houses and suffered the emotional impact of the experienced situation. Several damages have been accounted, which range from total loss to partial damages in centres. In spite of the service interruption, the Foundation moves forward in implementing diverse strategies which have allowed re-establishing the functioning of an important number of centres.

## Losses among workers and effects on their emotional state<sup>5</sup>:

In the collapsed playgroup centres and those with severe damages, 862 workers are employed. From them, 201 female workers lost their houses. Even if a great number of workers have returned to work, diverse emotional states can be appreciated which require a prompt intervention in crisis: posttraumatic stress, anguish, loss of relatives, panic crisis, among others.

<sup>&</sup>lt;sup>5</sup> Worker Ximena Osores Cancino, classroom assistant at Los Conquistadores de Cauquenes Nursery School, Maule Region, died because of the collapse of her parent's house in the Chanco district, the night of the earthquake.

#### Damages in centres' infrastructure:

Chart N°2 N° of centres and its coverage classified by type of damage.

Category of Damage	Nº of centres	Children Coverage		
With no apparent damage	208	14.918		
Slight	200	14.633		
Moderate	156	12.522		
Severe	56	4.543		
Collapsed	14	737		
General Total	634	47.353		

Source: Information updated on 26th March 2010, INTEGRA Foundation.

As it can be appreciated in the former chart, 634 centres suffered some kind of damages:

- ➤ 408 present slight damages which do not stop functioning or they are in similar conditions as they were before the earthquake.
- ➤ 156 present non-structural moderate damages and work is being done in formulating reparation projects.
- ➤ 56 present severe damages which partially endanger their structure.
- ➤ 14 were declared collapsed infrastructure with structural damages which endanger more than 75% of the building.

The collapsed centres (total loss) are concentrated in regions La Araucanía (6), Maule (4), O'Higgins (3) and Biobío (1).

Currently, 161 centres are not operating<sup>6</sup>.

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<sup>&</sup>lt;sup>6</sup> Information updated on 26th March 2010, INTEGRA Foundation.

 $$\operatorname{\textsc{Chart}}\nolimits N^o 3$$  Collapsed centres and with severe damages, coverage and workers.

		Centres				
Region	Severe Damages			Children Coverage	Workers	
Valparaíso	15	0	15	1.004	175	
O'Higgins	0	3	3	65	9	
Maule	6	4	10	674	99	
Biobío	9	1	10	605	74	
Araucanía	13	6	19	1.113	208	
Metropolitana	13	0	13	1.819	297	
Total	56	14	70	5.280	862	

Source: Information updated on the 26 March 2010, INTEGRA Foundation.

#### 3. OBJECTIVES AND COMPONENTS

The scope of this project will be focused on 31 institutional centres which have their infrastructure collapsed and with severe damages, representing 44% of the total of the centres in these conditions.

### **General Objective:**

To recover the assistance service to 2.894 children from 31 playgroup centres and nursery schools affected by the earthquake / tsunami (collapsed centres and with severe damages), through the reconstruction and reestablishment of the service in accordance with current institutional and legal standards for the early childhood education in Chile.

Chart Nº4 Identification of institutional centres which are beneficiaries of the projects

		Centres		Children
Region	Severe Damages	Collapsed	Total	Coverage
O'Higgins	0	3	3	96
Maule	5	4	9	666
Biobío	4	1	5	406
Araucanía	0	4	4	246
Metropolitana	10	0	10	1.480
Total	19	12	31	2.894

Source: Information updated on the 26 March 2010, INTEGRA Foundation.

#### **Description of components:**

#### Component 1: Infrastructure.

The objective of this component is to rebuild 12 educational centres which have collapsed and to repair 19 which have severe damages in their infrastructure to recover the capacity to look after 2.894 children from the districts affected by the earthquake and tsunami, in conditions which favour protecting and safe educational atmospheres, and that allow an integral development of the assisted boys and girls.

The activities identified will include: design of projects, tenders and hiring building work services, independent revision and obtaining working permits, execution of building works, supervision and final reception.

#### Component 2: Equipment.

The objective of this component is to provide equipments to 12 collapsed educational institutions, according to institutional standards, in order to recover the capacity of looking after 798 children from districts affected by the earthquake and tsunami. The equipment consists of furniture for classrooms, administrative areas and services of the building. They boost significant learning experiences which contribute to the achievement of expected learning and development for the age of children looked after.

The identified activities will include: tenders and allocation of equipment, reception and quality control, distribution logistics.

#### Component 3: Operation of playgroup centres and nursery schools.

The objective of this component is to provide the service of early childhood education and food to boys and girls whose families live in situation of poverty and social vulnerability, in playgroup centres and nursery schools with working hours from Monday to Friday from 8:30 A.M. to 8:00 P.M. hrs. The educational program considers strengthening teaching practices, participation of families and work with community networks.

## 4. GANTT CHART

Activities	Months												
Activities	1	2	3	4	5	6	7	8	9	10	11	12	20
Infrastructure													
Designs of architecture and specialised work.	Х												
Independent revision and obtaining building work permits.	Х	х	х	х									
Tender and allocation of works.		Х	Х	Х									
Execution of works.				Х	Х	Х	Х	Х	Х	Х	Х		
Supervision of works				Х	Х	Х	Х	Х	Х	Х	Х		
Reception of works											Х	Х	
Equipment													
Tender and allocation				х									
Reception and quality control.								Х					
Logistics and distribution											х	х	
Operation													
Service operation											Х	Х	
Auditing, follow up and assess	ment												
External Auditing				Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
First Advance Report				х									
Second Advance Report							Х						
Third Advance Report												Х	
Final Assessment													Х

#### 5. AUDITING AND FOLLOW UP

Auditing and follow up actions of the components execution are considered, in order to assure the achievement of the project expected results. The programmed actions are:

- Administrative financing auditing, conducted by a, external entity allocated by open tender, which should deliver an opinion about the fulfilment of contractual clauses, accountability of the transferred resources and recommendations of internal control, to ensure the adequate use of granted resources.
- ➤ Advance reports: 3 advance reports should be issued at different stages of the project execution, which will include the following indicators according to the advance stage the components are:

Components	Indicators
	N° of built centres.
Infrastructure	N° of repaired centres.
	Budgetary execution.
Favrings and	N° of institutions with equipment.
Equipment	Budgetary execution.
Operation	N° of registered children
	3 follow up reports
Follow up and assessment	1 auditing report
	1 final assessment report

#### 6. ASSESSMENT

The assessment of the project results is associated to the objective of reestablishing the service of early childhood education in areas affected by the catastrophe, considering the quality and satisfaction criteria of the service user families.

The expected results of this reconstruction project are associated to the 4 areas of intervention<sup>7</sup>:

- Reestablishment of early childhood education service in the areas of the catastrophe according to the demand and in definite institutional centres which counts with quality standards.
- 2. Learning and development of children, being this area one of the main expected results along service, directly associated to INTEGRA Foundation's mission.
- Participation of families and communities, which involves gathering userfamilies' opinions about service satisfaction and to establish coordination actions with local networks. It is considered in the project to widespread its results within the community.
- 4. Teaching practices, this area is considered important because it is one of the key components of early childhood education's quality, which contributes in a significant way to learning, development and well-being of boys and girls looked after.

To measure results, standardise tools will be used in agreement with local reality, which are mentioned here below:

- Perfil de Logros Aprendizajes de la Educación parvularia (PLAEP) [Profile of Learning Achievements in Early Childhood Education]. Revised version. Barrera, F., Guzmán, D. y Soto, C., 2009. Standardise instrument in Chile which assesses learning based on the Bases Curriculares de la Educación parvularia [Curriculum Basis in Early childhood education]
- Escala Observacional del Desarrollo (EOD) [Observational Scale of Development]. Secadas, F., 2006. Instrument which allows providing a diagnosis of the state of development in which children are at the moment of exploration, as well as describing processes and time sequences in the main development areas and designing procedures of educational intervention.

<sup>&</sup>lt;sup>7</sup> The assessment design is based in the intervention model of the project "Programa futuro infantil hoy" ["Program Today's childhood future"] developed by the Western Sydney University in Australia, Minera Escondida Foundation and the Junta Nacional de Jardines Infantiles (JUNJI) [Nursery schools board]. INTEGRA Foundation actively participates in this project.

Pauta de Observación de Actividades Pedagógicas Preescolares [Observation Guideline of Preschool Teaching Activities]. Edwards, M., De Amesti, A. y Eisenberg, N., 1999. Instrument which assesses the educational situation children experience within the activity room. It might be combined with other instrument to be defined, aimed to assess teaching practices.

Chart N°1
Assessment of project expected results

INTERVENTION SCOPE	EXPECTED RESULTS	INDICATORS	INSTRUMENTS /VERIFICATION MEANS	ASSESSME NT DEADLINE	COST (US\$) <sup>8</sup>		
Reestablishmen     t of the service	Early childhood education service for 2.894 children in 31 playgroup centres and nursery schools.	<ul><li>1.1 Capacity of attention (number of offered places)</li><li>1.2 Registration (number of registered boys and girls)</li></ul>	<ul><li>Report of assistance capacity</li><li>Registration records</li></ul>		0		
2. Children's learning and development	Children looked after achieve learning and a state of development according to their age.	2.1 Learning (percentage of children which obtain expected learning and over expected for their age)  2.2 Development (percentage of children that obtain 60% or more of the expected behaviour for their age)	<ul> <li>PLAEP instrument applied to children which meet the requirements to be assessed.</li> <li>Escala Observacional del Desarrollo (EOD) [Observational Scale of Development] applied to a sample.</li> </ul>	After 8	31.731		
3. Participation of families and communities	The families of children looked after feel satisfied with the quality of the early childhood educational service. The teams of playgroup centres and nursery schools create working networks with community organisms.	<ul><li>3.1 Satisfaction of families (percentage of families which are satisfied or very satisfied with the service)</li><li>3.2 Work with networks (percentage of centres which established networks with the community)</li></ul>	<ul> <li>Instrument of satisfaction for INTEGRA user-families applied to a sample.</li> <li>Work Survey with network for the Director of the centre.</li> </ul>	months of continuous operation	28.846		
4. Teaching practices	Teaching practices developed in playgroup centres and nursery schools are of high quality.	4.1 Presence of activities or behaviours which favour learning (percentage of achievement of activities in "positive" categories in the centres' classrooms)	Observation Guideline of Preschool Teaching Activities, applied to each classroom.		10.577		
Administrative expenses, transport, travel allowances							
TOTAL COST FOR R	ESULT ASSESSMENT				76.923		

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<sup>&</sup>lt;sup>8</sup> Exchange rate 520 Chilean pesos for one American dollar.

#### 7. COSTS

Item of investment	Estimated Costs (US\$)	%		
Reestablishment	2.960.000	78,06		
Repairing	570.186	15,04		
Equipment	146.246	3,86		
Auditing	38.461	1,01		
Assessment	76.923	2,03		
Total	3.791.816	100,00		

Bank accounts will be available for the exclusive transference of financial resources associated to the project:

Pesos Account: 6361089-5 Dollars Account: 510008602-8

Bank of Beneficiary: Banco Santander Chile

SWIFT: BSCHCLRM

Address: Bandera 140, Santiago, Chile.

8. APPENDIXES **8.1 LIST OF CENTRES AND REOPENING COSTS** 

Nº	Region	District	Name of Centre	Capacity Nursery School	Capacity of Children	Child Population in the district*	Land Requirement	Land Area (m2)	Area to be build (m2)	Land Cost (US\$200*/m2) (US\$)**	Building Cost (US\$800*/m2) (US\$)**	Total Cost (US\$)**
1	O'Higgins	Las Cabras	Las Palmitas	0	32	1.595			97	0	77.600	77.600
2	O"Higgins	Paredones	Rayito De Sol	0	32	390	Si	260	97	52.000	77.600	129.600
3	O"Higgins	Peralillo	San Gerardo	0	32	656			97	0	77.600	77.600
4	Maule	Parral	Los Triguitos	18	96	2.489			464	0	371.200	371.200
5	Maule	Constitucion	Sol Y Luna	36	96	4.440	Si	1.000	536	200.000	428.800	628.800
6	Maule	Pencahue	Rayito De Luna	0	64	636			240	0	192.000	192.000
7	Maule	Talca	Micaeliano	0	32	17.156	Si	290	132	58.000	105.600	163.600
8	Bio Bio	Cabrero	Javiera Carrera	18	96	2.441			464	0	371.200	371.200
9	Araucanía	Temuco	Trañi-Trañi	0	32	22.052	Si	290	132	58.000	105.600	163.600
10	Araucanía	Vilcun	Copito De Nieve	0	32	1.902			132	0	105.600	105.600
11	Araucanía	Angol	Belen	36	64	3.612			473	0	378.400	378.400
12	Araucanía	Los Sauces	Pin - Pon	18	64	469			376	0	300.800	300.800
			TOTAL	126	672	57.838		1.840	3.240	368.000	2.592.000	2.960.000
				79	98							

<sup>\*</sup> Source: Instituto Nacional de Estadísticas [National Statistics Institute]. Projection of child population from 0 to 4 years old. \*\*Exchange rate 520 Chilean pesos for one American dollar.

#### **8.2 LIST OF CENTRES AND REOPENING COSTS**

Nº	Region	District	Name of Centre	Capacity Nursery School	Capacity of Children	Child Population in the district*	Area to be repaired*** (m2)	Total Cost (US\$ 60 /m2) (US\$)**
1	Maule	Cauquenes	Semillita	0	96	2.742	336	20.160
2	Maule	Licanten	Papelucho	0	64	516	336	20.160
3	Maule	Licanten	S.C. Capullito	36	0	516	195	11.700
4	Maule	Linares	Niditos Del Valle	0	96	6.187	409,6	24.576
5	Maule	Retiro	Girasol	0	32	1.153	230,4	13.824
6	Bio Bio	Los Angeles	Los Angelitos	0	96	15.168	409,6	24.576
7	Bio Bio	Tome	Chacra Alicia	0	32	3.768	230,4	13.824
8	Bio Bio	Yungay	Rayo De Luna	0	64	1.230	336	20.160
9	Bio Bio	Lota	La Lamparita	36	64	3.279	425,4	25.524
10	Metropolitana	Til Til	Mi Huertito Travieso	18	32	1.435	336	20.160
11	Metropolitana	Maria Pinto	San Enrique	18	32	915	469,2	28.152
12	Metropolitana	Maria Pinto	Santa Luisa	18	32	915	363,6	21.816
13	Metropolitana	San Pedro	Los Pelluquitos	18	64	635	441,6	26.496
14	Metropolitana	La Florida	Casita De Juguete	36	160	25.737	659	39.540
15	Metropolitana	Maipu	Patrona De Chile	54	128	61.710	781,2	46.872
16	Metropolitana	Ñuñoa	Sol Naciente	64	128	7.286	854,4	51.264
17	Metropolitana	Pudahuel	Rinconcito Magico	126	192	20.632	1260,2	75.612
18	Metropolitana	Renca	Pablo Neruda	18	160	10.462	703,2	42.192
19	Metropolitana	Renca	Maria Flora Yanez	54	128	10.462	726,3	43.578
			TOTAL	496	1600	174.748	9.503,10	570.186
				2.09	2.096			

<sup>\*</sup> Source: Instituto Nacional de Estadísticas [National Statistics Institute]. Projection of child population from 0 to 4 years old.

\*\*Exchange rate 520 Chilean pesos for one American dollar.

\*\*\*Refers to the identified area to be repaired in the building.

#### 8.3 COSTS OF EQUIPPING REPLACEMENT CENTRES

Nº	Region	District	Name of Centre	Capacity Nursery School	Capacity of Children	Child Population in the district*	Didactic Material*** (US\$)**	Equipment (US\$)**	Freight (US\$)**	TOTAL (US\$)**
1	O"Higgins	Las Cabras	Las Palmitas	0	32	1.595	1.473	3.926	1.596	6.995
2	O"Higgins	Paredones	Rayito De Sol	0	32	390	1.473	3.926	1.596	6.995
3	O"Higgins	Peralillo	San Gerardo	0	32	656	1.473	3.926	1.596	6.995
4	Maule	Parral	Los Triguitos	18	96	2.489	4.415	18.061	2.835	25.310
5	Maule	Constitucion	Sol Y Luna	36	96	4.440	4.841	4.720	3.765	13.326
6	Maule	Pencahue	Rayito De Luna	0	64	636	2.091	7.272	1.438	10.801
7	Maule	Talca	Micaeliano	0	32	17.156	1.473	3.926	719	6.118
8	Bio Bio	Cabrero	Javiera Carrera	18	96	2.441	4.415	18.061	3.092	25.568
9	Araucanía	Temuco	Trañi-Trañi	0	32	22.052	1.473	3.926	2.075	7.474
10	Araucanía	Vilcun	Copito De Nieve	0	32	1.902	1.473	3.926	2.075	7.474
11	Araucanía	Angol	Belen	36	64	3.612	3.368	10.986	4.600	18.955
12	Araucanía	Los Sauces	Pin – Pon	18	64	469	2.942	3.943	3.350	10.235
			TOTAL	126	672	57.838	30.910	86.598	28.738	146.246
				798						

<sup>\*</sup> Source: Instituto Nacional de Estadísticas [National Statistics Institute]. Projection of child population from 0 to 4 years old. \*\*Exchange rate 520 Chilean pesos for one American dollar.

<sup>\*\*\*</sup>The didactic material is assigned according to coefficients by institutional building and children looked after, therefore it is not directly proportional.

## 8.4 IDENTIFICATION OF REPLACEMENT CENTRES FOR ARCHITECTONICAL PROGRAM

To 32 children (North Area)

Region	District	Code	Centre	Capacity Nursery School	Capacity of Children
O"Higgins	Las Cabras	61702	Las Palmitas	0	32
O"Higgins	Paredones	63301	Rayito De Sol	0	32
O"Higgins	Peralillo	62701	San Gerardo	0	32

To 32 children (South Area)

Region	District	District Code Centre		Capacity Nursery School	Capacity of Children
Maule	Talca	71011	Micaeliano	0	32
Araucanía	canía Temuco 91217 Trañi-Trañi		0	32	
Araucanía	Vilcun	91503	Copito De Nieve	0	32

To 64 children (South Area)

Region	District	Code	Centre	Capacity Nursery School	Capacity of Children
Maule	Pencahue	71601	Rayito De Luna	0	64

To 64 children and 18 infants (South Area)

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Region	District	Code	Centre	Capacity Nursery School	Capacity of Children
Araucanía	Los Sauces	91101	Pin – Pon	18	64

To 64 children and 36 infants (South Area)

Region	District	Code	ode Centre	Capacity Nursery School	Capacity of Children
Araucanía	Angol	90102	Belen	36	64

To 96 children and 18 infants (South Area)

Region	District	Code	Centre	Capacity Nursery School	Capacity of Children
Maule	Maule Parral 72301		Los Triguitos	18	96
Bio Bio	Cabrero	82202	Javiera Carrera	18	96

To 96 children and 18 infants (South Area)

Region	District	Code	Centre	Capacity Nursery School	Capacity of Children
Maule	Constitución	71701	Sol Y Luna	36	96

## **8.5 ARCHITECTONICAL PROGRAMS**

## PLAYGROUP CENTRE FOR 32 CHILDREN – NORTH AREA

Item	Description of sites	Quantity	SQM	Total usable square meters
1	Children Area			
1.1	Activity Room	1	35	35
1.2	Health Habits Room (2 WC. 3 sinks 1tub for children)	1	7	7
2	Administrative Area			
2,1	Offices	1	7	7
2,2	Personnel and disabled toilet (1 WC. 1 sink)	1	3,6	3,6
2,3	Personnel dinning room	1	8	8
2,4	Store room of didactic material	1	4	4
3	Service Area			
3,1	General Kitchen (with a sink)	1	8	8
3,2	Food store room	1	3	3
3,3	Cleaning items store room	1	0,5	0,5
3,4	Personnel Toilet (1 WC, 1sink, 1 shower)	1	2,3	2,3
4	Sub Total			78
	Circulation corridors 10% from sub total			8
5	Sub Total 2 total usable SQM			86
	Non-usable areas 12% of total (walls, pillars, others)			10
	TOTAL SQM			97

## PLAYGROUP CENTRE FOR 32 CHILDREN - SOUTH AREA

				Total usable square
Item	Description of sites	Quantity	SQM	meters
1	Children Area			
1.1	Activity Room	1	35	35
1.2	Health Habits Room (2 WC. 3 sinks 1tub for children)	1	7	7
2	Administrative Area			
2,1	Offices	1	7	7
2,2	Personnel and disabled toilet (1 WC. 1 sink)	1	3,6	3,6
2,3	Personnel dinning room	1	8	8
2,4	Store room of didactic material	1	4	4
3	Service Area			
3,1	General Kitchen (with a sink)	1	8	8
3,2	Food store room	1	3	3
3,3	Cleaning items store room	1	0,5	0,5
3,4	Personnel Toilet (1 WC, 1sink, 1 shower)	1	2,3	2,3
4	Sub Total			78
	Circulation corridors 10% from sub total			8
	Covered activity ground			32
5	Sub Total 2 total usable SQM			118
	Non-usable areas 12% of total (walls, pillars, others)			14
	TOTAL SQM			132

## PLAYGROUP CENTRE FOR 64 CHILDREN – SOUTH AREA

Item	Description of sites	Quantity	SQM	Total usable square meters
1	Children Area			
1.1	Activity Room	2	35	70
1.2	Health Habits Room (2 WC. 3 sinks 1tub for children)	2	7	14
2	Administrative Area			
2,1	Hall	1	4	4
2,2	Offices	1	8	8
2,3	Personnel Toilet (1 WC. 1 sink)	1	1,8	1,8
2,4	Disabled Toilet	1	3,6	3,6
2,5	Personnel dinning room	1	10	10
2,6	Store room of didactic material	1	5,5	5,5
3	Service Area			
3,1	Service Hall	1	1,5	1,5
3,2	General Kitchen (with a sink)	1	11	11
3,3	Food store room	1	4	4
3,4	Cleaning items store room	1	0,5	0,5
3,5	Personnel Toilet (1 WC, 1sink, 1 shower)	1	2,3	2,3
4	Sub Total			136
	Circulation corridors 10% from sub total			14
5	Covered activity ground			64
	Sub Total 2 total usable SQM			214
6	Non-usable areas 12% of total (walls, pillars, others)			26
	TOTAL SQM			240

# PLAYGROUP CENTRE FOR 64 CHILDREN AND NURSERY SCHOOL FOR 18 INFANTS – SOUTH AREA

Item	Description of sites	Quantitu	COM	Total usable square
1	Description of sites Children Area	Quantity	SQIVI	meters
1.1	Activity Room	2	35	70
1.2	Health Habits Room (2 WC. 3 sinks 1tub for children)	2	7	14
2	Administrative Area		'	14
2.1	Hall	1	5	5
2.2	Offices	2	7,5	15
2.3	Personnel Toilet (1 WC. 1 sink)	2	1,8	3,6
2,4	Disabled Toilet	1	3,6	3,6
2,5	Personnel dinning room	1	12	12
2,6	Store room of didactic material	1	5,5	5,5
3	Service Area		-,-	-,-
3,1	General Kitchen (with a sink)	1	11	11
3,2	Food store room	1	5	5
3,3	Cleaning items store room	1	0,5	0,5
3,4	Personnel Toilet (1 WC, 1sink, 1 shower)	1	2,3	2,3
4	Nursery			
4,1	Hall Nursery	1	2	2
4,2	Activity room 18 infants	1	45	45
4,3	Room for changing nappies	1	11	11
4,4	Storage Room	1	1,8	1,8
4,5	Personnel Toilet (1 WC. 1 sink)	1	1,8	1,8
4,6	Store room of nursery didactic material	1	3	3
5	Nursery Service Area			
5,1	Milk kitchen	1	5,5	5,5
5,2	Kitchen for solid food	1	8	8
5,3	Nursery food storage room	1	3	3
5,4	Nursery cleaning items storage room	1	0,5	0,5
6	Sub Total			229
	Circulation corridors 10% from sub total			23
	Covered activity ground			84
7	Sub Total 2 total usable SQM			336
	Non-usable areas 12% of total (walls, pillars, others)			40
8	TOTAL SQM			376

# PLAYGROUP CENTRE FOR 64 CHILDREN AND NURSERY SCHOOL FOR 36 INFANTS – SOUTH AREA

Item	Description of sites	Quantity	SQM	Total usable square meters
1	Children Area		0 4	
1.1	Activity Room	2	35	70
1.2	Health Habits Room (2 WC. 3 sinks 1tub for children)	2	7	14
2	Administrative Area			
2.1	Hall	1	5	5
2.2	Offices	2	7,5	15
2.3	Personnel Toilet (1 WC. 1 sink)	2	1,8	3,6
2,4	Disabled Toilet	1	3,6	3,6
2,5	Personnel dinning room	1	18	18
2,6	Store room of didactic material	1	5,5	5,5
3	Service Area			
3,1	General Kitchen (with a sink)	1	11	11
3,2	Food store room	1	5	5
3,3	Cleaning items store room	1	0,5	0,5
3,4	Personnel Toilet (1 WC, 1sink, 1 shower)	1	2,3	2,3
4	Nursery			
4,1	Hall Nursery	1	4	4
4,2	Activity room 18 infants	2	45	90
4,3	Room for changing nappies	1	16	16
4,4	Storage Room	1	1,8	1,8
4,5	Personnel Toilet (1 WC. 1 sink)	1	1,8	1,8
4,6	Store room of nursery didactic material	1	5	5
5	Nursery Service Area			
5,1	Milk kitchen	1	6,5	6,5
5,2	Kitchen for solid food	1	10	10
5,3	Nursery food storage room	1	4	4
5,4	Nursery cleaning items storage room	1	0,5	0,5
6	Sub Total			293
	Circulation corridors 10% from sub total			29
	Covered activity ground			100
7	Sub Total 2 total usable SQM			422
	Non-usable areas 12% of total (walls, pillars, others)			51
8	TOTAL SQM			473

# PLAYGROUP CENTRE FOR 96 CHILDREN AND NURSERY SCHOOL FOR 18 INFANTS SOUTH AREA

Item	Description of sites	Overtitus	SOM	Total usable square
1	Description of sites Children Area	Quantity	SQM	meters
1.1	Activity Room	3	35	105
1.2	Health Habits Room (2 WC. 3 sinks 1tub for children)	3	7	21
2	Administrative Area		-	
2.1	Hall	1	6	6
2.2	Offices	2	7,5	15
2.3	Personnel Toilet (1 WC. 1 sink)	2	1,8	3,6
2,4	Disabled Toilet	1	3,6	3,6
2,5	Personnel dinning room	1	18	18
2,6	Store room of didactic material	1	7	7
3	Service Area			
3,1	Service Hall	1	2	2
3,2	General Kitchen (with a sink)	1	14	14
3,3	Food store room	1	6	6
3,4	Cleaning items store room	1	1	1
3,5	Personnel Toilet (1 WC, 1sink, 1 shower)	1	2,3	2,3
4	Nursery			
4,1	Hall Nursery	1	2	2
4,3	Activity room 18 infants	1	45	45
4,4	Room for changing nappies	1	11	11
4,5	Storage Room	1	1,8	1,8
4,6	Personnel Toilet (1 WC. 1 sink)	1	1,8	1,8
4,7	Store room of nursery didactic material	1	3	3
5	Nursery Service Area			
5,1	Milk kitchen	1	5,5	5,5
5,2	Kitchen for solid food	1	8	8
5,3	Nursery food storage room	1	3	3
5,4	Nursery cleaning items storage room	1	0,5	0,5
	Sub Total			286
6	Circulation corridors 10% from sub total			29
7	Covered activity ground			100
	Sub Total 2 total usable SQM			415
8	Non-usable areas 12% of total (walls, pillars, others)			50
	TOTAL SQM			464

# PLAYGROUP CENTRE FOR 96 CHILDREN AND NURSERY SCHOOL FOR 36 INFANTS SOUTH AREA

Item	Description of sites	Oversity	SOM	Total usable square
1	Children Area	Quantity	SQM	meters
1.1	Activity Room	3	35	105
1.2	Health Habits Room (2 WC. 3 sinks 1tub for children)	3	7	21
2	Administrative Area			
2.1	Hall	1	6	6
2.2	Offices	2	7,5	15
2.3	Personnel Toilet (1 WC. 1 sink)	2	1,8	3,6
2,4	Disabled Toilet	1	3,6	3,6
2,5	Personnel dinning room	1	18	18
2,6	Store room of didactic material	1	7	7
3	Service Area			
3,1	Service Hall	1	2	2
3,2	General Kitchen (with a sink)	1	14	14
3,3	Food store room	1	6	6
3,4	Cleaning items store room	1	1	1
3,5	Personnel Toilet (1 WC, 1sink, 1 shower)	1	2,3	2,3
4	Nursery			
4,1	Hall Nursery	1	4	4
4,3	Activity room 18 infants	2	45	90
4,4	Room for changing nappies	1	16	16
4,5	Storage Room	1	1,8	1,8
4,6	Personnel Toilet (1 WC. 1 sink)	1	1,8	1,8
4,7	Store room of nursery didactic material	1	5	5
5	Nursery Service Area			
5,1	Milk kitchen	1	6,5	6,5
5,2	Kitchen for solid food	1	10	10
5,3	Nursery food storage room	1	4	4
5,4	Nursery cleaning items storage room	1	0,5	0,5
	Sub Total			344
6	Circulation corridors 10% from sub total			34
7	Covered activity ground			100
	Sub Total 2 total usable SQM			479
8	Non-usable areas 12% of total (walls, pillars, others)			57
	TOTAL SQM			536