

**Estimación de los indicadores de desnutrición
Infantil en micro niveles, Caso Boliviano**

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Working paper:1011-23
Febrero,2012

Estimación de los indicadores de desnutrición Infantil en micro niveles, caso Boliviano

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24 de mayo de 2012

Resumen

Una de las principales limitaciones para hacer frente a la desnutrición infantil es la falta de información necesaria para orientar los recursos de manera adecuada, debe tenerse presente que la única fuente de información para conocer esta información en Bolivia, es a través de la Encuesta Nacional de Demografía y Salud (ENDSA) que logra a lo sumo, estimaciones representativas a un nivel departamental, urbano rural. Este artículo emplea la técnica de estimación en áreas pequeñas de Elbers, Lanjouw, y Lanjouw, 2002, 2003, que combina información de la encuesta con datos del censo a nivel individual, con la finalidad de obtener estimaciones a niveles inferiores de agregación de lo que permite la encuesta. Se emplea la ENDSA en su versión 4, en conjunción con la información del Censo Nacional de Población y Vivienda de 2001, teniendo la visión de proveer información útil a nivel municipal.

Palabras clave: Desnutrición aguda, desnutrición global, desnutrición severa, Bolivia, micro-estimación, municipios de Bolivia, Encuesta Nacional de Demografía y Salud, Objetivos de Desarrollo del Milenio.

*El autor agradece a Werner Hernani Limarino por su colaboración en la realización de este artículo. Los comentarios son bienvenidos a achirino@aru.org.bo, este documento es una versión preliminar y se pide no citarlo. Todos los errores son responsabilidades del autor. Los puntos de vista expresados en el documento no representan necesariamente aquellos de la Fundación ARU

1. Introducción

El tema de desnutrición es uno de los mayores preocupaciones en el ámbito de la salud pública, aun más en los países en vías de desarrollo. La Organización Mundial de la Salud (WHO, 2001) calculó que en el año 2000 cerca de 3.7 millones de niños pequeños alrededor del mundo murieron a causa de la desnutrición. Similarmente, Pelletier, Frongillo, y Habicht, 1994 estimó que alrededor de la mitad de las muertes en cuatro países en vías de desarrollo son debidas a los efectos de la desnutrición sobre enfermedades infecciosas. La desnutrición también está asociada con muertes y discapacidades en la vida, desarrollo mental retrasado, disminución cognitiva y del comportamiento funcional durante la niñez y la adolescencia y un pobre rendimiento escolar (de Onis, Frongillo, y Blossner, 1980, Galler y Barrett, 2001, Glewwe, Jacoby, y King, 2001, Shariff, Bond, y Johnson, 2000).

En el caso particular de Bolivia, basados en INE, 2010 se tiene que:

- El 27 por ciento de los niños y niñas menores de cinco años padece desnutrición crónica y el 8 por ciento presenta retraso en el crecimiento en condición severa
- Las variables que explican de manera importante la variabilidad en la desnutrición crónica son el departamento y el área de residencia; la educación de la madre y el quintil de riqueza.
- El nivel de desnutrición crónica aumenta a medida que disminuye la educación de la madre y el quintil de riqueza al cual el hogar pertenece; y es mayor en áreas rurales que en las urbanas.

Sin duda, el problema de la desnutrición es muy importante, y más aun en un país como Bolivia, mencionar que reducir la desnutrición forma parte de los objetivos de desarrollo del milenio y actualmente se ejecutan programas como el de “desnutrición cero” para apalejar este mal. Sin embargo, una de las mayores dificultades al abordar este tema es el hecho de no contar con información desagregada a niveles básicos de decisión, i.e. municipios, tener presente que la estructura político administrativa de Bolivia otorga atribuciones a los departamentos, municipios para ejecutar estrategias que mejoren la salud y la calidad de vida de la población, por ello, la necesidad urgente de contar con información del estado nutricional a niveles más bajos de lo que las encuestas lo permiten. Bajo ese principio, este documento emplea la metodología descrita en Elbers y cols., 2002, 2003 que combina información de la encuesta con la del censo con la finalidad de lograr información desagregada a niveles más bajos y que ayuden en la toma de decisiones para la implementación y la mejora de las políticas públicas.

El documento se desarrolla de la siguiente forma: en la sección 2 se presentan los conceptos relacionados a la medición y predicción del estado nutricional infantil, posterior a ello se aborda el tema metodológico (sección 3), luego se presentan los datos empleados (sección 4) y finalmente se concluye con los resultados en la sección 5.

2. Medición y predicción del estado nutricional infantil

Datos de las encuestas a menudo incluyen medidas de peso y talla, en particular para los niños. El peso y la altura no indican directamente desnutrición. Además de la edad y el sexo, existen otros factores que intervienen que no son necesariamente la ingesta de nutrientes, i.e. variación genética en particular. Sin embargo, incluso en presencia de variaciones naturales, es posible el uso de medidas físicas para evaluar la adecuación de la dieta y el crecimiento, sobre todo en bebés y niños. Esto se hace mediante la comparación de indicadores con la distribución del mismo indicador para un grupo de referencia “sanos” y la identificación de “extremos” o salidas (“anormal”) de esta distribución. Entre las medidas antropométricas más utilizadas están la de peso para la talla, el peso para la edad y talla para la edad de las puntuaciones Z , que miden el número de desviaciones estándar entre el valor del indicador antropométrico de una persona y la mediana de la población de referencia de crecimiento del mismo sexo y grupo de edad o altura. Deficiencias en el peso para la talla, el peso para la edad y talla para la edad de

las puntuaciones Z son, respectivamente, llamadas desnutrición “Aguda”, “Global” y “Crónica” El límite convencional de -2 (total) se utiliza para calcular la prevalencia de la desnutrición y el límite de -3 indica una desnutrición severa.

2.1. Peso para la talla (Wasting)

Peso para la talla (W/H) mide el peso corporal en relación con la altura y tiene la ventaja de no requerir datos de edad. Normalmente, W/H se utiliza como un indicador del estado nutricional actual y puede ser útil para la detección de niños en riesgo y para la medición de cambios a corto plazo en el estado nutricional. En el otro extremo del espectro, W/H también puede ser utilizado para la construcción de indicadores de la obesidad. Un nivel bajo en W/H en relación con un niño del mismo sexo y edad, en la población de referencia se conoce como “delgadez”. Casos extremos W/H se conocen comúnmente como “pérdida”. Perder puede ser la consecuencia del hambre o de enfermedad grave (diarrea en particular). Un bajo W/H también puede ser debido a enfermedades crónicas, aunque la talla para la edad es un mejor indicador para el monitoreo de tales problemas. Es importante señalar que la falta de evidencia de desgaste en una población no implica la ausencia de los actuales problemas nutricionales como baja talla para la edad.

2.2. Peso para la edad (Underweight)

Peso para la edad (W/A) refleja la masa corporal en relación con la edad. W/A es en efecto, una medida compuesta de la talla para la edad y peso para la altura, dificultando la interpretación. Un nivel bajo de W/A con respecto a un niño del mismo sexo y edad en la población de referencia; se conoce como “ligereza”, mientras que el término “bajo peso” se utiliza comúnmente para referirse a los déficits graves o patológicos en W/A . W/A se utiliza comúnmente para la vigilancia del crecimiento y para evaluar los cambios en la magnitud de la desnutrición a través del tiempo. Sin embargo, W/A confunde los efectos de salud a corto y largo plazo y los problemas de nutrición.

2.3. Talla para la edad (Stunting)

Talla para la edad (H/A) refleja el crecimiento lineal acumulativo. Un déficit H/A indican insuficiencias del pasado o crónica de la nutrición y/o enfermedades crónicas o frecuentes, pero no se puede medir a corto plazo. Un nivel bajo de H/A en relación con un niño del mismo sexo y edad en la población de referencia se conoce como “falta”. Los casos extremos H/A , en el que falta se interpreta como patológica, se les conoce como “retraso de crecimiento”. H/A se usa principalmente como un indicador de la población y no para el seguimiento del crecimiento individual.

2.4. Indicadores

A pesar que la medida y corte utilizado para definir la desnutrición son ampliamente aceptadas en la economía, la salud pública, y los estudios de nutrición, se emplean otros indicadores para medir la desnutrición. La metodología no depende de la medición o del corte, por lo que otras medidas o puntos de corte se pueden utilizar.

Siguiendo a Pradhan, Sahn, Younger, y Institute, 2001 se estandariza los z-score mediante una transformación basada en un grupo de edad y sexo establecido, que preserve las propiedades de los z-score originales, con la finalidad de facilitar el cálculo de los indicadores de Foster, Greer, y Thorbecke, 1984, la elección del grupo de edad y sexo es arbitraria. Se elige a las niñas de 24 meses como grupo de referencia.

Ahora, $y_i^{(k)}$ es la medida antropométrica (k) del individuo i , el indicador de Foster y cols., 1984 como medida de la desnutrición con parámetro θ se puede escribir de la siguiente manera:

$$p^{\theta,(k)} = \frac{1}{N} * \sum_i I(y_i^{(k)} < z^{(k)}) * \left(\frac{z^{(k)} - y_i^{(k)}}{z^{(k)}}\right)^\theta \quad (1)$$

Donde $k = 1, 2, 3$, medidas antropométricas, $I(\cdot)$ función indicatriz, $z^{(k)}$ los valores estandarizados correspondientes a -2 de los z-score, con $\theta = 0$ representa la prevalencia de desnutrición, con $\theta = 1$ la brecha de desnutrición y con $\theta = 2$ la severidad de desnutrición.

3. Metodología

La metodología es similar a la estimación de pequeñas areas de Elbers y cols., 2002, 2003 donde analiza la pobreza y la desigualdad. Ambas metodologías combinan datos de encuestas con datos del censo obteniendo estimación en niveles mas bajos de desagregación de lo que la encuesta permite.

La idea básica es explicada por la secuencia:

1. Se identifican variables comunes de diferentes fuentes de información entre el censo y la encuesta.
2. Los parámetros antropométricos son estimados usando la base de datos de la encuesta (Estimación), empleando las variables comunes.
3. Las estimaciones son entonces usadas para imputar los indicadores antropométricas para cada registro en el censo (Simulación).
4. Los indicadores antropométricos imputados son agregados hasta conseguir la estimación en areas pequeñas (Agregación).

3.1. Estimación

Para avanzar en el problema de la estimación y la simulación, definamos la notación. El cluster y el individuo son denotados por c y i respectivamente. $y_{ci}^{(k)}$ es la k -ésima ($1 \leq k \leq K$) medida antropométrica de interés, y $x_{ci}^{(k)}$ es un $d^{(k)}$ vector de características observables que es usado como predictor de $y_{ci}^{(k)}$. En esta aplicación $K = 3$, con $k = 1$, $k = 2$ y $k = 3$ las medidas de desnutrición estandarizadas de peso para la talla, peso para la edad y talla para la edad, respectivamente. La siguiente aproximación lineal a la distribución condicional de $y_{ci}^{(k)}$ es considerada.

$$y_{ci}^{(k)} = E \left[y_{ci}^{(k)} | x_{ci}^{(k)} \right] + \mu_{ci}^{(k)} = x_{ci}^{(k)T} \beta^{(k)} + \mu_{ci}^{(k)} \quad (2)$$

Donde el vector de ruido $\mu \sim \mathcal{F}(0, \Sigma)$ que consiste del termino $\eta_c^{(k)}$ el efecto del cluster (locación) c y $\varepsilon_{ci}^{(k)}$ el efecto individual. Notar que, $\beta^{(k)}$ no solo captura el efecto de x sobre y . Sino también la variación existente debido al muestreo.

$$\mu_{ci}^{(k)} = \eta_c^{(k)} + \varepsilon_{ci}^{(k)} \quad (3)$$

Debido a que se esta trabajando sobre una muestra, el efecto de cluster no esta disponible para todas las c que se disponen en el censo. No se puede incluir la variable de locación (cluster) en el modelo de la encuesta, es así que el residuo de 2 debe contener la variación del cluster. Por lo tanto se estima la desviación de $\eta_c^{(k)}$.

Tomando la esperanza aritmética sobre 3 sobre los cluster c para un medida antropométrica k , se tiene:

$$\mu_{c.}^{(k)} = \eta_c^{(k)} + \varepsilon_{ci}^{(k)} \quad (4)$$

Donde,

$$E \left[\left(\mu_c^{(k)} \right)^2 \right] = \left(\sigma_\eta^{(k)} \right)^2 + \left(\tau_c^{(k)} \right)^2 \quad (5)$$

Asumiendo que $\eta^{(k)}$ y $\varepsilon_{ci}^{(k)}$ se distribuyen de manera normal e independientes entre ellas, Elbers y cols., 2002, 2003 dio una estimación de la varianza de la distribución del componente $\eta_c^{(k)}$.

$$\begin{aligned} var \left(\left(\hat{\sigma}_\eta^{(k)} \right)^2 \right) &\approx \sum_c \left[\left(a_c^{(k)} \right)^2 var \left(\left(u_c^{(k)} \right)^2 \right) + \left(b_c^{(k)} \right)^2 var \left(\left(\hat{\tau}_c^{(k)} \right)^2 \right) \right] \\ &\approx \sum_c 2 \left[\left(a_c^{(k)} \right)^2 \left\{ \left(\hat{\sigma}_\eta^{(k)} \right)^2 + \left(\hat{\tau}_c^{(k)} \right)^2 + 2 \left(\hat{\sigma}_\eta^{(k)} \right)^2 \left(\hat{\tau}_c^{(k)} \right)^2 \right\} \right. \\ &\quad \left. + \left(b_c^{(k)} \right)^2 \frac{\left(\hat{\tau}_c^{(k)} \right)^2}{\eta_c^{(k)} - 1} \right] \end{aligned} \quad (6)$$

De acuerdo con Elbers y cols., 2002, 2003 el residuo $\varepsilon_{ci}^{(k)}$ puede ser ajustado a un modelo logit y regresar un $\varepsilon_{ci}^{(k)}$ transformado sobre las características del hogar.

$$\ln \left[\frac{\left(\varepsilon_{ci}^{(k)} \right)^2}{A^{(k)} - \left(\varepsilon_{ci}^{(k)} \right)^2} \right] = z_{ci}^T \hat{\alpha}^{(k)} + \tau_{ci}^{(k)} \quad (7)$$

Donde $A^{(k)}$ es igual al $1,05 * \max(\varepsilon_{ci}^{(k)})^2$, el estimador de la varianza de $\varepsilon_{ci}^{(k)}$ puede ser resuelto con:

$$\left(\hat{\sigma}_{\varepsilon, ci}^{(k)} \right)^2 = \left[\frac{A^{(k)} B^{(k)}}{1 + B^{(k)}} \right] + \frac{1}{2} var(\tau^{(k)}) \left[\frac{A^{(k)} B^{(k)} (1 - B^{(k)})}{(1 + B^{(k)})^3} \right] \quad (8)$$

El ultimo resultado indica una violación de los supuestos para el uso de un modelo OLS, por lo que una regresión GLS es necesaria. De esta forma, en la primera etapa de regresión se realiza un modelo de mínimos cuadrados ordinarios (OLS) de x sobre y . Entonces, los residuos del modelo OLS son usados para estimar la varianza de cada componente del ruido.

Con todos los componentes de la matriz de varianzas y covarianzas del termino del ruido, la regresión de los mínimos cuadrados generalizados puede ser ejecutada. La distribución de cada componente de los términos del ruido de la distribución empírica del OLS es también estimada. Con todos estos resultados, el calculo de la simulación puede proceder.

3.2. Simulación

Usando los resultados de las estimaciones, los indicadores antropométricos son imputados para cada niño menor a 5 años en el censo. Los valores imputados están sujetos a dos fuentes de error: el error del modelo, que proviene del error en la estimación de los coeficientes del modelo, y el error idiosincrático, que provienen de echo hasta si el verdadero β fuera conocido, los valores imputados no deberían ser iguales a los actuales indicadores antropométricos debido al componente sistemático μ de la ecuación 2.

Como Elbers y cols., 2002, 2003, estas dos fuentes de errores son tomada en cuenta a través de la simulación de Monte Carlo. En cada ronda de simulación el coeficiente $\hat{\beta}^{(k)}$ es calculado y entonces usado para imputar el componente sistemático de la ecuación 2.

El modelo de simulación es:

$$\tilde{y}_{ci}^{(k)} = x_{ci}^{(k)T} \tilde{\beta}^{(k)} + \tilde{\eta}_c^{(k)} + \tilde{\varepsilon}_{ci}^{(k)} \quad (9)$$

Donde $\tilde{\beta}^{(k)} \sim N(\hat{\beta}^{(k)}, \hat{\Sigma}_{\beta}^{(k)})$

$\tilde{\eta}_c$ es una variable aleatoria (Puede distribuirse como una normal o una T) con varianza definida en 6
 $\tilde{\varepsilon}_{ci}^{(k)}$ es una variable aleatoria con varianza definida en 8, $B^{(k)} = \exp\left(\tilde{z}_{ci}^{(k)T} \tilde{\alpha}^{(k)}\right)$ y $\tilde{\alpha}^{(k)} \sim N(\hat{\alpha}^{(k)}, \hat{\Sigma}_{\alpha}^{(k)})$

4. Datos

Los datos empleados son: en el caso de la encuesta, se emplea la Encuesta Nacional de Demografía y Salud del 2003 (ENDSA-2003), y en el caso del censo, al Censo Nacional de Población y Vivienda de 2001. La ENDSA-2003 captura las medidas de peso, talla y edad de los niños menores a 5 años por lo cual es posible el calculo de las medidas antropométricas, para el calculo de las medidas antropométricas se emplea los patrones establecidos por el Multicentro 2006, OMS que empleo la información de seis países alrededor del mundo (Brazil, Ghana, India, Noruega, Omán, Estados Unidos).

Debido a las diferencias regionales marcadas en Bolivia se decidió dividir a Bolivia en 21 regiones, donde al interior de cada una de ellas se realiza la metodología presentada. Esta division considera los estratos que define el diseño muestral de la ENDSA-2003. i.e Departamental urbano rural. notar que en lo anterior se logra 18 regiones, las 3 regiones extras que completan las 21 se obtienen de la desagregación de las regiones urbanas de los departamentos de La Paz, Cochabamba y Santa Cruz en 2 sub regiones, ciudad capital y resto urbano, tal como se muestra en la tabla 1.

El empleo de información de una encuesta conlleva a trabajar con el diseño muestral y sus implicaciones, de manera mas puntual los factores de expansión asignadas a los niños menores a 5 años. Se utiliza para este trabajo los factores de expansión homologados por la fundación¹ para la serie de la ENDSA 1989-2008.

El grupo de variables de las características observables (x), se componen por:

- Información individual del niño o niña
- Información de la vivienda y el hogar del niño o niña
- Información del jefe del hogar del niño o niña
- Información de los miembros del hogar del niño o niña
- Información del area cercana (cluster) del niño o niña
- Información del municipio

También se emplearon distintas interacciones entre los grupos de variables, el listado completo se muestra en la tabla 8.

5. Resultados

Un modelo antropométrico fue construido para las tres medidas de desnutrición en cada una de las 21 regiones, empleando como regresores a aquellas que tenían un distribución similar en el censo y en la encuesta, un punto importante es que la predicción del modelo mejoro al incluir el grupo de variables que marcaba información del area cercana del niño o niña, al igual que las diversas interacciones que se

¹Mayores referencias a achirino@aru.org.bo

incluyeron en el modelo.

Respecto a la estimación de la varianza del cluster el efecto fue de 0 en todas las regiones. Una vez que se obtuvo las predicciones del estado nutricional de los niños y niñas en el censo a partir de la simulación los datos fueron agregados a nivel de las 112 provincias y los 327 municipios en Bolivia.

En las tablas 2, 3 y 4 se muestran a los indicadores de Foster y cols., 1984 para la encuesta y para las estimaciones del censo, con la finalidad de visualizar mejor la comparación de las estimaciones de la encuesta y las estimaciones en el censo basados en la metodología las tablas 5, 6 y 7 muestra el resultado del Student's t-Test de igualdad de media para la prevalencia de desnutrición de los tres indicadores antropométricos.

Los casos donde el test rechaza la hipótesis nula de igualdad de medias son: Para el caso de la desnutrición aguda, Beni urbana y Tarija rural, en la desnutrición global en el area urbana Cochabamba y Beni y en el area rural La Paz, Potosí y Santa Cruz, finalmente para la desnutrición crónica, en el area urbana La Paz y Tarija y en el area rural Oruro y Beni. Esta diferencia no debe traer una mayor discusión dado que esta relacionada a la cobertura propia de la encuesta con relación a la magnitud de alcance que tiene la metodología al cubrir zonas que no son exploradas en la encuesta. De manera similar se calculo los intervalos de confianza asociados a cada medida de desnutrición para los niveles de desagregación de la encuesta, con la finalidad de observar la dispersion de los indicadores en las dos fuentes, se muestra en el gráfico 1.

A partir del gráfico 1 pueden distinguirse dos aspectos importantes; lo primero, el grado de dispersion de los indicadores del censo son mucho menores o los de la encuesta lo que implica un mejor acercamiento a la situación real de la desnutrición en el país. Y lo segundo, que la estimación dada por el censo pertenece esta dentro del intervalo de confianza que brinda la encuesta, a excepción de Potosí rural y Beni urbana para la desnutrición global y Oruro rural en el caso de la desnutrición crónica, que denotan como la metodología realiza una entrada a areas no exploradas por la encuesta.

Las tablas 9, 12 y 15 presentan los resultados de las regresiones de primera etapa de los tres indicadores antropométricos y además el nivel de bondad de ajuste. Donde se observa un mejor ajuste en el caso de la desnutrición crónica y niveles muy bajos de ajuste con la desnutrición aguda, este comportamiento es atribuible completamente a las características propias de estas medidas antropométricas, dado que la desnutrición crónica es un indicador de largo plazo y vislumbra una historia pasada, mientras que la desnutrición aguda es mas volátil y responde a cambios de corto plazo y esto hace que no muchas de las variables x presenten una significativa asociación.

Sin animos de entrar a un lenguaje causal se debe mencionar la intervención de ciertas variables sobre los distintos modelos, por ejemplo: Los coeficientes de las variables de edad dummy mayores a 0 son todos negativos, lo que significa que un niño de cero años de edad, es más saludable que un niño más grande después de controlar por otros factores. Esto refleja que los niños son menos propensos a estar expuestos a alimentos contaminados antes de ser destetados, por lo que son menos propensos a sufrir de enfermedades como la diarrea. Para la desnutrición crónica se percibe también que a un mayor promedio de años de educación en el hogar la situación nutricional mejora.

Con la finalidad de examinar y visualizar el estado de la desnutrición en Bolivia se compara los distintos indicadores de desnutrición con los promedios de estos indicadores para distintas regiones del mundo a nivel de los 327 municipios de Bolivia, empleando las referencias encontradas en UNICEF y United Nations Children's Fund, 2006 que coinciden con el ámbito temporal de los resultados de la metodología. Las comparaciones se muestran en los gráficos 2, 3 y 4. Con la finalidad de conocer de manera visual

el lugar geográfico de los municipios comparados, se elaboraron mapas municipales para las medidas de desnutrición, estos mapas se presentan en el anexo A. Estos mapas reflejan un aspecto altamente alarmante del estado nutricional de ciertos municipios, y evidencia que existen municipios que se encuentran en situaciones mucho más desfavorables que las regiones con prevalencia de desnutrición más altas en el mundo, particularmente para la desnutrición global y crónica.

Se presenta en el B los mapas a nivel de los 9 departamentos las 112 provincias y los 327 municipios de Bolivia para los tres indicadores de desnutrición considerando la desnutrición total y severa, estos mapas permiten a los distintos actores interesados en políticas asociadas a la temática de desnutrición tener una herramienta que les ayuda a focalizar programas, proyectos e intervenciones en las áreas más vulnerables del territorio boliviano.

6. Conclusiones

Las estimaciones de la prevalencia de la desnutrición infantil antes solo estaban disponibles para el nivel de desagregación que permitía la ENDSA. Estas estimaciones, con los niveles de la encuesta a menudo enmascaraban grandes disparidades en la prevalencia de la desnutrición. Y a menos que haya estratos con una prevalencia extremadamente alta de desnutrición, la focalización basada en el estrato de nivel es poco probable, y por ende la mala asignación de los recursos es probable.

Para superar el problema de la escasez de datos, se elaboró una metodología para estimar la prevalencia de la desnutrición infantil a nivel de áreas geográficas pequeñas. Se logró estimar la prevalencia de desnutrición a nivel de las 112 provincias y 327 municipios de Bolivia. Aunque esta metodología se aplicó sobre los datos de Bolivia, esta se puede aplicar fácilmente a otros países donde los datos del censo y los datos de la encuesta con un componente antropométricas están disponibles, e incluso abarcar otras áreas temáticas de interés.

En los niveles de desagregación de la encuesta las estimaciones concuerdan con las estimaciones de la encuesta y por lo general tienen menores errores estándar que las estimaciones de la encuesta. Las estimaciones de áreas pequeñas pueden ser fácilmente presentada en un cuadro, pero su presentación en mapas permite a los políticos ver las áreas de la desnutrición severa y la formulación de políticas focalizadas.

Los mapas de nutrición y la interacción que tienen con otras variables a nivel municipal ayudan a identificar las posibles causas de la desnutrición en diferentes lugares. Esto a su vez proporciona a los políticos información valiosa sobre el diseño adecuado de programas de nutrición infantil.

Tabla 1: Asignación de regiones por departamento y área

Departamentos	Área	
	Urbana	Rural
Chuquisaca	1	10
La Paz	21, 22 ¹	11
Cochabamba	31, 32 ¹	12
Oruro	4	13
Potosí	5	14
Tarija	6	15
Santa Cruz	71, 72 ¹	16
Beni	8	17
Pando	9	18

¹Ciudad capital y resto urbano

Tabla 2: Incidence of Wasting

	Survey Estimates			Census Estimates		
	Prevalence	Gap	Severity	Prevalence	Gap	Severity
Urbana						
Chuquisaca	0,00658	0,00190	0,00108	0,00814	0,00079	0,00015
La Paz	0,01323	0,00262	0,00109	0,01133	0,00105	0,00019
Cochabamba	0,01385	0,00476	0,00251	0,02331	0,00305	0,00081
Oruro	0,00651	0,00054	0,00013	0,01396	0,00163	0,00036
Potosi	0,01630	0,00421	0,00216	0,03099	0,00485	0,00153
Tarija	0,02883	0,00641	0,00367	0,03169	0,00319	0,00059
Santa Cruz	0,01922	0,00270	0,00083	0,02388	0,00240	0,00045
Beni	0,04595	0,01301	0,00546	0,08646	0,01521	0,00515
Pando	0,01802	0,00096	0,00010	0,03605	0,00155	0,00010
Rural						
Chuquisaca	0,00944	0,00270	0,00096	0,00949	0,00086	0,00014
La Paz	0,01207	0,00552	0,00454	0,01028	0,00153	0,00069
Cochabamba	0,03005	0,00979	0,00520	0,03336	0,00341	0,00064
Oruro	0,01037	0,00054	0,00003	0,02523	0,00192	0,00027
Potosi	0,02127	0,00921	0,00585	0,02600	0,00311	0,00077
Tarija	0,03788	0,00976	0,00476	0,05719	0,01341	0,00525
Santa Cruz	0,03989	0,01054	0,00532	0,03765	0,00518	0,00138
Beni	0,05015	0,01131	0,00381	0,06252	0,00891	0,00217
Pando	0,04058	0,01120	0,00378	0,06652	0,01312	0,00387

Tabla 3: Incidence of Underweight

	Survey Estimates			Census Estimates		
	Prevalence	Gap	Severity	Prevalence	Gap	Severity
Urbana						
Chuquisaca	0,03823	0,00345	0,00062	0,03940	0,00382	0,00062
La Paz	0,04504	0,00412	0,00102	0,04159	0,00429	0,00077
Cochabamba	0,02630	0,00451	0,00134	0,07163	0,00695	0,00124
Oruro	0,03179	0,00379	0,00086	0,04270	0,00419	0,00096
Potosi	0,08730	0,01193	0,00279	0,08290	0,01071	0,00235
Tarija	0,02004	0,00301	0,00055	0,02361	0,00193	0,00027
Santa Cruz	0,02448	0,00259	0,00057	0,02873	0,00229	0,00034
Beni	0,07672	0,01312	0,00350	0,12329	0,01888	0,00561
Pando	0,01521	0,00091	0,00005	0,00837	0,00063	0,00009
Rural						
Chuquisaca	0,08747	0,01154	0,00333	0,08074	0,00638	0,00093
La Paz	0,05864	0,00609	0,00213	0,09084	0,00825	0,00135
Cochabamba	0,11234	0,01766	0,00509	0,14454	0,01445	0,00244
Oruro	0,06163	0,00347	0,00044	0,05793	0,00478	0,00067
Potosi	0,14751	0,02501	0,00945	0,22645	0,02553	0,00480
Tarija	0,07459	0,01190	0,00545	0,08121	0,00655	0,00091
Santa Cruz	0,04933	0,00904	0,00265	0,08564	0,01139	0,00273
Beni	0,08134	0,01171	0,00321	0,09161	0,00932	0,00173
Pando	0,07549	0,00794	0,00128	0,10504	0,00929	0,00136

Gráfico 1: Intervalos de confianza de los indicadores de prevalencia de desnutrición de la encuesta y el censo por area y departamento

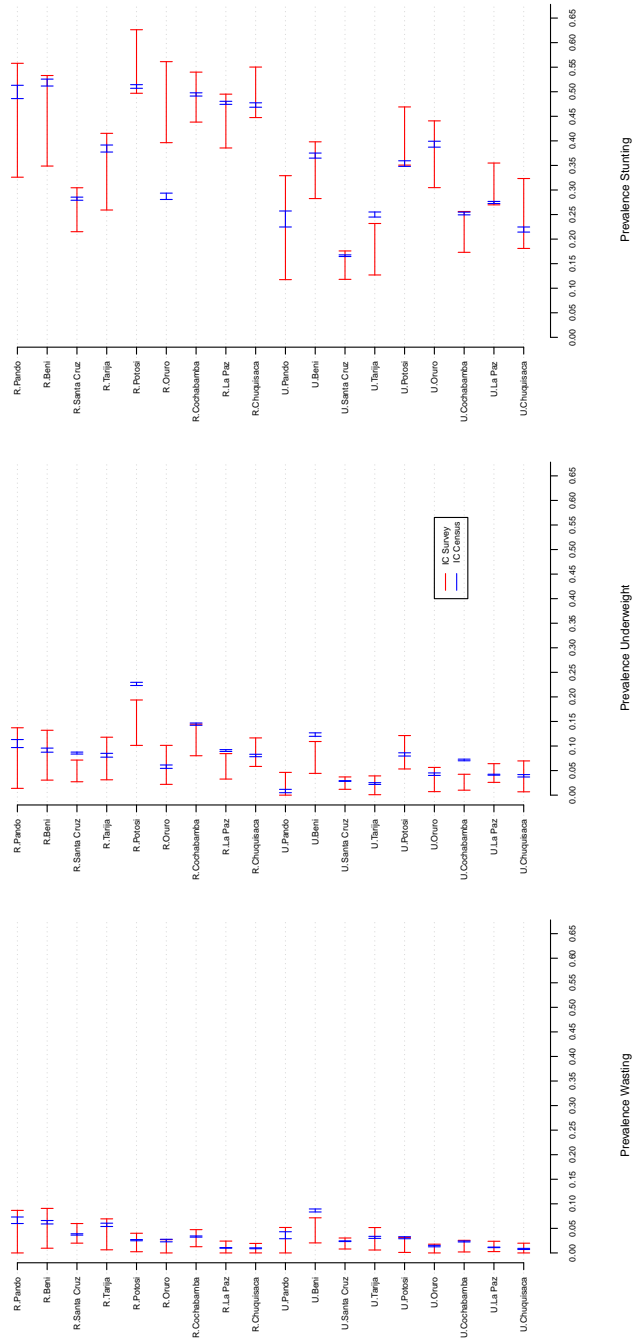


Tabla 4: Incidence of Stunting

	Survey Estimates			Census Estimates		
	Prevalence	Gap	Severity	Prevalence	Gap	Severity
Urbana						
Chuquisaca	0,25217	0,00811	0,00045	0,21949	0,00721	0,00040
La Paz	0,31231	0,01050	0,00078	0,27457	0,01046	0,00074
Cochabamba	0,21464	0,00801	0,00069	0,25215	0,01035	0,00082
Oruro	0,37276	0,01330	0,00107	0,39323	0,01713	0,00122
Potosi	0,40987	0,01643	0,00109	0,35375	0,01622	0,00126
Tarija	0,17938	0,00738	0,00100	0,25006	0,00992	0,00070
Santa Cruz	0,14698	0,00466	0,00044	0,16623	0,00658	0,00050
Beni	0,34031	0,02146	0,00325	0,37003	0,02626	0,00356
Pando	0,22332	0,00690	0,00040	0,24095	0,00830	0,00048
Rural						
Chuquisaca	0,49884	0,02093	0,00148	0,47300	0,01608	0,00086
La Paz	0,44034	0,01730	0,00125	0,47745	0,02332	0,00208
Cochabamba	0,48909	0,01980	0,00138	0,49455	0,02533	0,00200
Oruro	0,47881	0,01578	0,00093	0,28714	0,01231	0,00101
Potosi	0,56160	0,02820	0,00279	0,51075	0,02346	0,00173
Tarija	0,33730	0,01478	0,00142	0,38440	0,02410	0,00287
Santa Cruz	0,25981	0,00848	0,00053	0,28227	0,01287	0,00108
Beni	0,44089	0,02045	0,00304	0,51870	0,03546	0,00421
Pando	0,44197	0,02784	0,00309	0,49962	0,04057	0,00501

Tabla 5: Student's t-Test for Wasting

Departamentos por region	Survey estimates		Census Estimates		Student's t-Test <i>p - value</i>
	Prevalence %	sd %	Prevalence %	sd %	
Urbana					
Chuquisaca	0,66 %	0,48 %	0,81 %	0,06 %	0,813
La Paz	1,32 %	0,38 %	1,13 %	0,03 %	0,630
Cochabamba	1,39 %	0,43 %	2,33 %	0,05 %	0,112
Oruro	0,65 %	0,41 %	1,40 %	0,08 %	0,474
Potosi	1,63 %	0,55 %	3,10 %	0,10 %	0,014
Tarija	2,88 %	0,82 %	3,17 %	0,11 %	0,752
Santa Cruz	1,92 %	0,40 %	2,39 %	0,04 %	0,787
Beni	4,60 %	0,92 %	8,65 %	0,16 %	0,000
Pando	1,80 %	1,22 %	3,61 %	0,36 %	0,117
Rural					
Chuquisaca	0,94 %	0,36 %	0,95 %	0,05 %	0,486
La Paz	1,21 %	0,44 %	1,03 %	0,03 %	0,594
Cochabamba	3,01 %	0,63 %	3,34 %	0,06 %	0,707
Oruro	1,04 %	0,60 %	2,52 %	0,13 %	0,020
Potosi	2,13 %	0,68 %	2,60 %	0,06 %	0,353
Tarija	3,79 %	1,14 %	5,72 %	0,17 %	0,001
Santa Cruz	3,99 %	0,72 %	3,77 %	0,07 %	0,867
Beni	5,02 %	1,46 %	6,25 %	0,18 %	0,608
Pando	4,06 %	1,66 %	6,65 %	0,34 %	0,051

Tabla 6: Student's t-Test for Underweight

Departamentos por region	Survey estimates		Census Estimates		Student's t-Test <i>p - value</i>
	Prevalence %	sd %	Prevalence %	sd %	
Urbana					
Chuquisaca	3,82 %	1,13 %	3,94 %	0,12 %	0,925
La Paz	4,50 %	0,69 %	4,16 %	0,05 %	0,862
Cochabamba	2,63 %	0,58 %	7,16 %	0,09 %	0,000
Oruro	3,18 %	0,89 %	4,27 %	0,13 %	0,475
Potosi	8,73 %	1,23 %	8,29 %	0,17 %	0,872
Tarija	2,00 %	0,69 %	2,36 %	0,09 %	0,537
Santa Cruz	2,45 %	0,46 %	2,87 %	0,04 %	0,631
Beni	7,67 %	1,17 %	12,33 %	0,18 %	0,000
Pando	1,52 %	1,12 %	0,84 %	0,17 %	0,485
Rural					
Chuquisaca	8,75 %	1,05 %	8,07 %	0,13 %	0,498
La Paz	5,86 %	0,94 %	9,08 %	0,10 %	0,000
Cochabamba	11,23 %	1,16 %	14,45 %	0,12 %	0,007
Oruro	6,16 %	1,43 %	5,79 %	0,18 %	0,408
Potosi	14,75 %	1,67 %	22,65 %	0,17 %	0,000
Tarija	7,46 %	1,57 %	8,12 %	0,20 %	0,077
Santa Cruz	4,93 %	0,80 %	8,56 %	0,10 %	0,000
Beni	8,13 %	1,83 %	9,16 %	0,21 %	0,589
Pando	7,55 %	2,23 %	10,50 %	0,42 %	0,390

Tabla 7: Student's t-Test for Stunting

Departamentos por region	Survey estimates		Census Estimates		Student's t-Test <i>p - value</i>
	Prevalence %	sd %	Prevalence %	sd %	
Urbana					
Chuquisaca	25,22 %	2,57 %	21,95 %	0,27 %	0,085
La Paz	31,23 %	1,54 %	27,46 %	0,11 %	0,002
Cochabamba	21,46 %	1,50 %	25,22 %	0,14 %	0,533
Oruro	37,28 %	2,45 %	39,32 %	0,31 %	0,511
Potosi	40,99 %	2,14 %	35,38 %	0,29 %	0,014
Tarija	17,94 %	1,89 %	25,01 %	0,26 %	0,000
Santa Cruz	14,70 %	1,04 %	16,62 %	0,09 %	0,631
Beni	34,03 %	2,08 %	37,00 %	0,26 %	0,036
Pando	22,33 %	3,82 %	24,10 %	0,83 %	0,685
Rural					
Chuquisaca	49,88 %	1,85 %	47,30 %	0,23 %	0,392
La Paz	44,03 %	1,98 %	47,75 %	0,16 %	0,014
Cochabamba	48,91 %	1,84 %	49,46 %	0,17 %	0,403
Oruro	47,88 %	2,98 %	28,71 %	0,33 %	0,000
Potosi	56,16 %	2,33 %	51,08 %	0,19 %	0,367
Tarija	33,73 %	2,82 %	38,44 %	0,36 %	0,013
Santa Cruz	25,98 %	1,61 %	28,23 %	0,16 %	0,217
Beni	44,09 %	3,33 %	51,87 %	0,36 %	0,000
Pando	44,20 %	4,18 %	49,96 %	0,69 %	0,515

Gráfico 2: Prevalencia de desnutrición aguda por municipio y los promedios en otras regiones del mundo

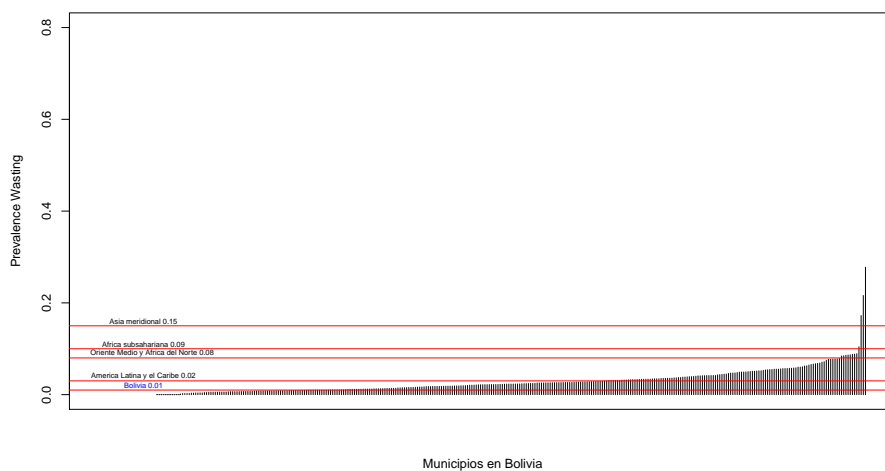


Gráfico 3: Prevalencia de desnutrición global por municipio y los promedios en otras regiones del mundo

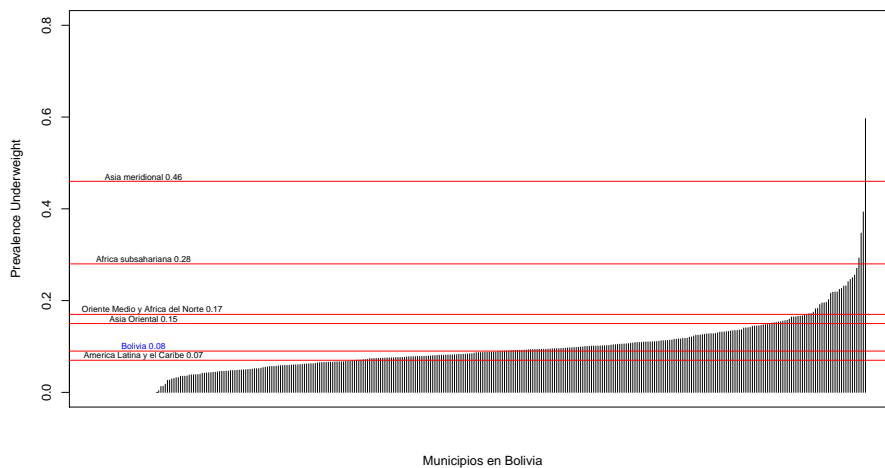


Gráfico 4: Prevalencia de desnutrición crónica por municipio y los promedios en otras regiones del mundo

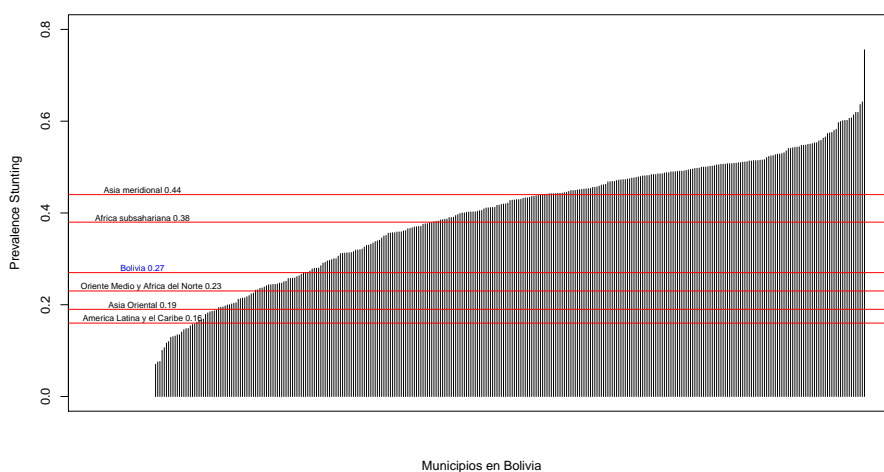


Tabla 8: Common Variables

Vарname	Variable Description
chage	Age of the child in years
chage0	Dummy:Children age=0
chage1	Dummy:Children age=1
chage2	Dummy:Children age=2
chage3	Dummy:Children age=3
chage4	Dummy:Children age=4
eco	Ecological zone
v06	Wall material
v07	Plastered walls
v08	Roof material
v09	Floor Material
v10	Source of water for drinking and cooking
v11	Type of water distribution
v14g	Bathroom use, shared? and type of drainage
v15	Energy in the house
v16	Fuel for cooking
v17	Ownership of space for cooking
v18	Number of rooms
v19	Number of rooms for sleeping
v201	Dummy:Radio ownership
v202	Dummy:Tv ownership
v203	Dummy:Bicycle ownership
v204	Dummy:Motorcycle ownership
v205	Dummy:Motor vehicle ownership
v206	Dummy:Refrigerator ownership
v207	Dummy:Phone or cellphone ownership
v208	Dummy:Electric water pump ownership
g01	Number of household members
v06_1	Dummy:Wall, brick, cement block
v06_2	Dummy:Wall, Adobe-mud
v06_3	Dummy:Walls, partitions, Quinche
v06_4	Dummy:Wall, Stone
v06_5	Dummy:Wall, Wood
v06_6	Dummy:Wall, Reed-palm-stride
v06_7	Dummy:Wall, Other
v08_1	Dummy:Ceiling, Galvanized-iron
v08_2	Dummy:Roof, Tin
v08_3	Dummy:Roof, concrete slab
v08_4	Dummy:Roof, palm straw-cane
v08_5	Dummy:Roof, Other
v09_1	Dummy:Floor, Land
v09_2	Dummy:Floor, wooden board
v09_3	Dummy:Floor, parquet
v09_4	Dummy:Apartment, Carpet, rugs
v09_5	Dummy:Floor, Cement
v09_6	Dummy:Floor, Mosaic-tile

Continued on next page

Varname	Variable Description
v09_7	Dummy:Floor, Brick
v09_8	Dummy:Floor, Other
v10_1	Dummy:Water source, pipe
v10_2	Dummy:Source of water standpipes
v10_3	Dummy:Source of water, water cart
v10_4	Dummy:Water source, well pump
v10_5	Dummy:Water source, pump Pit
v10_6	Dummy:Water source, river
v10_7	Dummy:Water source, lake
v10_8	Dummy:Water source, other
v11_6	Dummy:Water distribution, Inside the house
v11_7	Dummy:Water distribution, within the lot
v11_8	Dummy:Water distribution, does not receive piped
v14g0	Dummy:No toilet or latrine water
v14g1	Dummy:With sewer and not shared with other households
v14g2	Dummy:With septic tank and not shared with other households
v14g3	Dummy:With septic tank and not shared with other households
v14g4	Dummy:At the surface and not shared with other households
v14g5	Dummy:With sewer and shared with other households
v14g6	Dummy:With septic tank and shared with other households
v14g7	Dummy:With pit latrines and shared with other households
v14g8	Dummy:At the surface and not shared with other households
v16_1	Dummy:Kitchen with: Wood
v16_2	Dummy:Kitchen with: Guano-dung
v16_3	Dummy:Kitchen with: Kerosene
v16_4	Dummy:Kitchen with: Gas
v16_5	Dummy:Kitchen with: Electricity
v16_6	Dummy:Kitchen with: Other
v16_7	Dummy:Kitchen with: Not used
jfedad	Household head age
jfsex	Dummy:Head of household sex
jfedu0	Dummy:Uneducated household head
jfedu1	Dummy:Head of household with incomplete primary education
jfedu2	Dummy:Head of household with complete primary education
jfedu3	Dummy:Head of household with incomplete secondary education
jfedu4	Dummy:Head of household with complete secondary education
jfedu5	Dummy:Head of household with higher education
jfdi1	Dummy:Quechua, native language of household head
jfdi2	Dummy:Aymara, native language of household head
jfdi3	Dummy:Spanish, native language of household head
jfdi4	Dummy:Guarani, native language of household head
jfdi5	Dummy:Another native language of household head
jfdi6	Dummy:Abroad, head of the household language
jfdi7	Dummy:No speech, the head of household
jfyaredu	Years of education of household head
mh01	Dummy:Persons under 15
mh02	Dummy:People between 15 and 24
mh03	Dummy:People between 25 and 64
mh04	Dummy:Seniors 64

Continued on next page

Varname	Variable Description
mhw05	Dummy:Women under 15
mhw06	Dummy:Women between 15 and 24
mhw07	Dummy:Women between 25 and 64
mhw08	Dummy:Women over 64
mhm09	Dummy:Men under 15
mhm10	Dummy:Men between 15 and 24
mhm11	Dummy:Men between 25 and 64
mhm12	Dummy:Men over 64
mh13	Dummy:Uneducated
mh14	Dummy:People with incomplete primary
mh15	Dummy:People with complete primary
mh16	Dummy:Persons with incomplete secondary
mh17	Dummy:People who have completed secondary
mh18	Dummy:People with higher education
mhw19	Dummy:Uneducated women in the home
mhw20	Dummy:Women with incomplete primary education at home
mhw21	Dummy:Women with complete primary home
mhw22	Dummy:Women with incomplete secondary home
mhw23	Dummy:Women with complete secondary home
mhw24	Dummy:Women with higher education in the home
mhm25	Dummy:Uneducated men in the home
mhm26	Dummy:Men with incomplete primary education at home
mhm27	Dummy:Men with complete primary home
mhm28	Dummy:Men with incomplete secondary home
mhm29	Dummy:Men with complete secondary home
mhm30	Dummy:Men with higher education in the home
mb01	Average years of homeschooling
mb02	Maximum years of homeschooling
mj01	Average number of children born at home
mj02	Average number of children dead in home
mj03	Total children born at home
mj04	Total of dead children at home
est_fla	Geographic stratum
estrat_e	Statistical Stratum
estrat_n	NBI Stratum
estrat_b	Stratum welfare
estab	Health facilities in the municipality
epis_d	Episodes of diarrhea in the municipality
coopart	Revenue sharing in the municipality
ing_pr	Municipality's own revenue
tot_ing	Total revenue of the municipality
inv_prod	Investment in production of the municipality
inv_infr	Investment in infrastructure in the municipality
inv_soc	Social Investment in the municipality
inv_mult	Multisectoral investment of the municipality
inv_otr	Other investments by the municipality
tot_inv	Total investment of the municipality
gast_fun	Operating expenses of the municipality
rt01	Reason for uneducated people in the cluster

Continued on next page

Varname	Variable Description
rt02	Ratio of people with incomplete primary education in the cluster
rt03	Primary reason for people to complete in the cluster
rt04	Ratio of people with incomplete secondary cluster
rt05	Ratio of people with incomplete secondary cluster
rt06	Ratio of people with higher education in the cluster
rt07	Reason for persons <5 years in the cluster
rt08	Ratio of women <5 years in the cluster
rt09	Ratio of males <5 years in the cluster
rt10	Ratio of uneducated woman in the cluster
rt11	Ratio of women with incomplete primary education in the cluster
rt12	Ratio of women with complete primary cluster
rt13	Ratio of women with incomplete secondary cluster
rt14	Ratio of women with incomplete secondary cluster
rt15	Ratio of women with higher education in the cluster
rt16	Ratio of uneducated men in the cluster
rt17	Ratio of men with incomplete primary education in the cluster
rt18	Ratio of men with complete primary in the cluster
rt19	Ratio of men with incomplete secondary cluster
rt20	Ratio of men with incomplete secondary cluster
rt21	Ratio of men with higher education in the cluster
rt22	Ratio of people under 15 years in the cluster
rt23	Ratio of people aged 15 to 24 years in the cluster
rt24	Ratio of people 25 to 64 years in the cluster
rt25	Ratio of seniors 64 years in the cluster
rt26	Ratio of women under 15 years in the cluster
rt27	Ratio of women between 15 and 24 years in the cluster
rt28	Ratio of women aged 25 to 64 years in the cluster
rt29	Ratio of women over 64 years in the cluster
rt30	Ratio of men under 15 years in the cluster
rt31	Ratio of men between 15 and 24 years in the cluster
rt32	Ratio of men between 25 and 64 years in the cluster
rt33	Ratio of men over 64 years in the cluster
v1011_1	Interaction:v10=1 with v11=6
v1011_2	Interaction:v10=1 with v11=7
v1011_3	Interaction:v10=2 with v11=8
v1011_4	Interaction:v10=3 with v11=8
v1011_5	Interaction:v10=4 with v11=8
v1011_6	Interaction:v10=5 with v11=8
v1011_7	Interaction:v10=6 with v11=8
v1011_8	Interaction:v10=7 with v11=8
v1011_9	Interaction:v10=8 with v11=8
v15v201	Interaction:Use of electricity, have a radio or stereo
v15v202	Interaction:Use of electricity, has a TV
v15v206	Interaction:Use of electricity, has a refrigerator
v15v16_1	Interaction:Use of electricity, cooking with wood
v15v16_2	Interaction:Use of electricity, kitchen with guano, dung
v15v16_3	Interaction:Use of electricity, cooking with kerosene
v15v16_4	Interaction:Use of electricity, gas cooker
v15v16_5	Interaction:Use of electricity, cooking with electricity

Continued on next page

Varname	Variable Description
v15v16_6	Interaction:Use of electricity, a kitchen with other means
v15v16_7	Interaction:Electricity use, not used for cooking
chsexchage0	Interaction:Sex with children age=0
chsexchage1	Interaction:Sex with children age=1
chsexchage2	Interaction:Sex with children age=2
chsexchage3	Interaction:Sex with children age=3
chsexchage4	Interaction:Sex with children age=4
mb02chage0	Interaction:Maximum years of education at home with children age=0
mb02chage1	Interaction:Maximum years of education at home with children age=1
mb02chage2	Interaction:Maximum years of education at home with children age=2
mb02chage3	Interaction:Maximum years of education at home with children age=3
mb02chage4	Interaction:Maximum years of education at home with children age=4
v06_1v07	Interaction:Brick wall with plaster walls
v06_2v07	Interaction:Wall of adobe, mud, plaster walls
v06_3v07	Interaction:Brick wall, barbecue, plaster walls
v06_4v07	Interaction:Stone wall with plaster walls
v06_5v07	Interaction:Wooden wall with plaster walls
v06_6v07	Interaction:Bamboo walls, palm, plastered walls trinco x
v06_7v07	Interaction:Wall of another material, with plaster walls
jfsexjfedu0	Interaction:Sex of household head, Uneducated household head
jfsexjfedu1	Interaction:Sex of household head, household head with incomplete primary
jfsexjfedu2	Interaction:Sex of household head, household head with complete primary
jfsexjfedu3	Interaction:Sex of household head, household head with incomplete secondary
jfsexjfedu4	Interaction:Sex of household head, household head completed secondary education
jfsexjfedu5	Interaction:Sex of household head, household head with higher education
jfedadjfedu0	Interaction:Age of household head, household head no education
jfedadjfedu1	Interaction:Age of head of household, head of household with incomplete primary
jfedadjfedu2	Interaction:Age of household head, household head with complete primary
jfedadjfedu3	Interaction:Age of head of household, head of household with incomplete secondary
jfedadjfedu4	Interaction:Age of head of household, head of household with complete secondary
jfedadjfedu5	Interaction:Age of household head, household head with higher education
jfedadchage0	Interaction:Age of head of household, children age=0
jfedadchage1	Interaction:Age of head of household, children age=1
jfedadchage2	Interaction:Age of head of household, children age=2

Continued on next page

Varname	Variable Description
jfedadchage3	Interaction:Age of head of household, children age=3
jfedadchage4	Interaction:Age of head of household, children age=4
chagejfedu0	Interaction:Age of child, uneducated head of household
chagejfedu1	Interaction:Age of child, head of household with incomplete primary
chagejfedu2	Interaction:Age of child, household head with complete primary
chagejfedu3	Interaction:Age of child, head of household with incomplete secondary
chagejfedu4	Interaction:Age of child, head of household with complete secondary
chagejfedu5	Interaction:Age of child, household head with higher education
jfedu0mj03	Interaction:Uneducated head of household, all children born at home
jfedu1mj03	Interaction:Household head with incomplete primary education, all children born at home
jfedu2mj03	Interaction:Household head with complete primary education, all children born at home
jfedu3mj03	Interaction:Household head with incomplete secondary, all children born at home
jfedu4mj03	Interaction:Household head with complete high school, all children born at home
jfedu5mj03	Interaction:Household head with higher education, all children born at home
v07v08_1	Interaction:Plastered walls, ceiling, galvanized-iron
v07v08_2	Interaction:Plaster walls, roof of tile (cement, clay)
v07v08_3	Interaction:Plastered walls, roof of concrete slab
v07v08_4	Interaction:Plastered walls, roof of thatched, cane, palm, mud
v07v08_5	Interaction:Plastered walls, other material roof
v07v09_1	Interaction:Plastered walls, dirt floor
v07v09_2	Interaction:Plastered walls, wood plank floor
v07v09_3	Interaction:Plaster walls, parquet floor or machimbre
v07v09_4	Interaction:Plastered walls, floor or carpet tapizones
v07v09_5	Interaction:Plastered walls, cement floor
v07v09_6	Interaction:Plaster walls, tile floor, ceramic tile or
v07v09_7	Interaction:Plastered walls, brick floor
v07v09_8	Interaction:Plastered walls, floor of other material
v15v06_1	Interaction:Energy in the home, brick wall, concrete block, concrete
v15v06_2	Interaction:Energy in the house, adobe wall
v15v06_3	Interaction:Energy in the home, brick wall, barbecue
v15v06_4	Interaction:Energy in the home, stone wall
v15v06_5	Interaction:Energy in the home, wood wall
v15v06_6	Interaction:Energy in the home, wall cane or palm trunk
v15v06_7	Interaction:Energy in the housing wall of another material
mj04chage0	Interaction:Total of dead children in the household, children age=0
mj04chage1	Interaction:Total of dead children in the home, children age=1
mj04chage2	Interaction:Total of dead children in the home, children age=2
mj04chage3	Interaction:Total of dead children in the home, children age=3

Continued on next page

Varname	Variable Description
mj04chage4	Interaction:Total of dead children in the home, children age=4
mhw19chage0	Interaction:Uneducated women at home, children age=0
mhw19chage1	Interaction:Uneducated women at home, children age=1
mhw19chage2	Interaction:Uneducated women at home, children age=2
mhw19chage3	Interaction:Uneducated women at home, children age=3
mhw19chage4	Interaction:Uneducated women at home, children age=4
mhw20chage0	Interaction:Women with incomplete primary education at home, children age=0
mhw20chage1	Interaction:Women with incomplete primary education at home, children age=1
mhw20chage2	Interaction:Women with incomplete primary education at home, children age=2
mhw20chage3	Interaction:Women with incomplete primary education at home, children age=3
mhw20chage4	Interaction:Women with incomplete primary education at home, children age=4
mhw21chage0	Interaction:Women with incomplete primary education at home, children age=0
mhw21chage1	Interaction:Women with incomplete primary education at home, children age=1
mhw21chage2	Interaction:Women with incomplete primary education at home, children age=2
mhw21chage3	Interaction:Women with incomplete primary education at home, children age=3
mhw21chage4	Interaction:Women with incomplete primary education at home, children age=4
mhw22chage0	Interaction:Women with incomplete primary education at home, children age=0
mhw22chage1	Interaction:Women with incomplete primary education at home, children age=1
mhw22chage2	Interaction:Women with incomplete primary education at home, children age=2
mhw22chage3	Interaction:Women with incomplete primary education at home, children age=3
mhw22chage4	Interaction:Women with incomplete primary education at home, children age=4
mhw23chage0	Interaction:Women with incomplete primary education at home, children age=0
mhw23chage1	Interaction:Women with incomplete primary education at home, children age=1
mhw23chage2	Interaction:Women with incomplete primary education at home, children age=2
mhw23chage3	Interaction:Women with incomplete primary education at home, children age=3
mhw23chage4	Interaction:Women with incomplete primary education at home, children age=4
mhw24chage0	Interaction:Women with incomplete primary education at home, children age=0

Continued on next page

Varname	Variable Description
mhw24chage1	Interaction:Women with incomplete primary education at home, children age=1
mhw24chage2	Interaction:Women with incomplete primary education at home, children age=2
mhw24chage3	Interaction:Women with incomplete primary education at home, children age=3
mhw24chage4	Interaction:Women with incomplete primary education at home, children age=4

Tabla 9: Standardization logarithm of weight for height of the regions 1 to 5, GLS Regression Results

Variables	1	21	22	31	32	4	5
chage2	-0.250 (0.073)**						
chage4	-0.048 (0.020)*						
chagejfedu1	0.025 (0.007)**						
chsex	0.030 (0.015)*						
jfedadchage2	0.009 (0.002)**						
jfedu2mj03	-0.039 (0.035)				-0.026 (0.010)*		
jfedu4mj03	0.015 (0.007)*					0.026 (0.009)**	
jfsex	-0.081 (0.021)**			0.076 (0.035)*		0.107 (0.039)**	
jfsexjfedu2	0.151 (0.084)						
mh13	0.035 (0.007)**						
mhm10	-0.026 (0.011)*				0.137 (0.033)**		
mhm11	-0.039 (0.016)*						
mhm26	-0.036 (0.008)**						
mhw07	0.045 (0.016)**				-0.121 (0.038)**		
mhw08	-0.113 (0.035)**						

Continued on next page

Variables	1	21	22	31	32	4	5
mhw21chage2	-0.301 (0.061)**						
mhw23chage2	-0.161 (0.046)**		-0.058 (0.037)		0.076 (0.038)*		
mj04chage0	-0.098 (0.036)**	0.048 (0.029)				-0.044 (0.019)*	
v07	-0.047 (0.025)	-0.175 (0.088)*	0.068 (0.029)*				
v07v09_6	-0.063 (0.023)**						
v15v16_1	-0.080 (0.040)*						
v17	0.041 (0.018)*				-0.040 (0.023)		
chagejfedu5		0.041 (0.012)**					
chsexchage1		-0.045 (0.021)*		0.068 (0.033)*			
chsexchage3		-0.023 (0.020)					-0.098 (0.026)**
jfedadjfedu5		-0.005 (0.001)**				0.004 (0.001)**	
jfdi2		0.035 (0.014)*				0.036 (0.017)*	0.075 (0.040)
jfsexjfedu5		0.101 (0.052)		-0.058 (0.037)			
mh04		-0.077 (0.029)**					
mhw20chage1		-0.018 (0.012)		-0.039 (0.020)	0.081 (0.024)**	-0.035 (0.020)	
mhw21chage1		0.059 (0.035)					
mhw23chage0		-0.038 (0.025)	-0.189 (0.041)**	-0.167 (0.040)**	0.181 (0.054)**		-0.060 (0.030)*
mhw24		0.050 (0.021)*			0.116 (0.035)**		
mhw24chage4		-0.075 (0.049)			-0.108 (0.044)*		
mj04		0.021 (0.010)*			0.032 (0.015)*		
rt11		0.162 (0.130)					
rt15		-0.493					

Continued on next page

Variables	1	21	22	31	32	4	5
		(0.182)**					
rt23		0.335					
		(0.145)*					
rt28		0.865					
		(0.208)**					
v06_1		0.212					
		(0.094)*					
v06_2v07		0.240					
		(0.095)*					
v10		0.014				0.018	
		(0.006)*				(0.006)**	
v15		0.121					
		(0.043)**					
v15v16_3		-0.052					
		(0.060)					
v203		0.023					
		(0.014)					
v207		0.024					
		(0.014)					
v208		-0.058		-0.085		0.351	
		(0.057)		(0.026)**		(0.057)**	
chagejfedu3			0.021				
			(0.013)				
chsexchage0			0.128				-0.103
			(0.040)**				(0.026)**
jfedadjfedu3			-0.004			0.006	
			(0.001)**			(0.002)**	
jfdi3			-0.036				
			(0.018)*				
mb02chage0			0.013				
			(0.004)**				
mh16			0.041				
			(0.016)*				
mhw05			-0.030	0.030		0.044	
			(0.011)**	(0.010)**		(0.011)**	
mhw19			0.048		0.062		
			(0.014)**		(0.024)**		
mhw19chage0			0.031				
			(0.023)				
mhw21			0.064				
			(0.025)*				
mhw21chage0			-0.144	-0.089	-0.192		
			(0.070)*	(0.050)	(0.077)*		
mhw22chage0			-0.262				

Continued on next page

Variables	1	21	22	31	32	4	5
			(0.072)**				
rt10			-0.871			-0.320	-0.839
			(0.285)**			(0.170)	(0.221)**
rt26			0.557				
			(0.166)**				
rt27			-0.617				
			(0.286)*				
v14g6			0.100			-0.219	
			(0.054)			(0.080)**	
chagejfedu0				-0.056			-0.075
				(0.035)			(0.023)**
chagejfedu2				-0.052		-0.047	
				(0.018)**		(0.014)**	
jfedadchage3				-0.001			
				(0.001)			
jfedadjfedu4				-0.003		0.004	
				(0.001)*		(0.002)*	
jfedu3				-0.204			
				(0.057)**			
jfedu3mj03				0.035			
				(0.013)**			
jfsexjfedu1				-0.072		-0.140	
				(0.033)*		(0.049)**	
mh02				-0.021	-0.056		
				(0.010)*	(0.022)*		
mhw20chage0				-0.032		-0.093	0.033
				(0.017)		(0.020)**	(0.014)*
mhw22chage4				-0.064		0.053	
				(0.036)		(0.026)*	
mhw23chage1				-0.064	0.107		
				(0.030)*	(0.034)**		
mhw24chage2				-0.085			
				(0.035)*			
mj02				0.034		0.028	
				(0.022)		(0.015)	
mj04chage2				-0.090			
				(0.030)**			
rt14				-0.430			
				(0.252)			
v07v09_5				-0.032		0.161	
				(0.020)		(0.072)*	
v10_4				0.127			
				(0.077)			
v16				0.042			

Continued on next page

Variables	1	21	22	31	32	4	5
				(0.018)*			
v19				0.031		-0.039	-0.012
				(0.010)**		(0.009)**	(0.008)
estrat_e					-0.097	0.025	
					(0.025)**	(0.011)*	
est_fila					-0.090		0.062
					(0.026)**		(0.016)**
g01					-0.062		
					(0.020)**		
mh03					0.072	-0.026	
					(0.027)**	(0.010)*	
mh15					0.112		
					(0.028)**		
mhm09					0.080		0.013
					(0.022)**		(0.006)*
mhw19chage1					-0.067		
					(0.023)**		
mhw20chage2					0.075	-0.049	
					(0.023)**	(0.018)**	
mhw20chage3					0.073	-0.073	0.065
					(0.022)**	(0.018)**	(0.018)**
mhw20chage4					0.090	-0.050	0.024
					(0.023)**	(0.018)**	(0.012)*
mhw22					0.122	-0.047	
					(0.027)**	(0.014)**	
mhw23chage3					0.124		
					(0.044)**		
mhw23chage4					0.153	-0.053	
					(0.036)**	(0.025)*	
mj04chage1					-0.074		
					(0.031)*		
rt01					0.882		
					(0.235)**		
rt02					0.807		0.357
					(0.277)**		(0.108)**
rt12					1.418		
					(0.824)		
rt17					-0.684		
					(0.341)*		
v08_3					0.069	0.133	0.063
					(0.035)*	(0.043)**	(0.035)
v15v16_4					0.220		
					(0.102)*		
v15v201					-0.251		

Continued on next page

Variables	1	21	22	31	32	4	5
					(0.093)**		
v16_4					-0.205		
					(0.099)*		
v201					0.291		
					(0.093)**		
chage1						-0.068	
						(0.026)**	
jfedad						-0.003	0.002
						(0.001)*	(0.001)*
jfedadjfedu1						0.007	
						(0.002)**	
jfedadjfedu2						0.005	
						(0.001)**	
jfedu1						-0.153	
						(0.073)*	
jfsexjfedu3						-0.145	
						(0.048)**	
jfsexjfedu4						-0.177	
						(0.051)**	
mb01						0.027	
						(0.007)**	
mb02						-0.029	
						(0.004)**	
mh14						0.031	
						(0.011)**	
mhm12						-0.113	
						(0.049)*	
mhm25						0.057	
						(0.012)**	
mhw19chage4						-0.022	
						(0.014)	
mhw24chage0						0.099	0.046
						(0.029)**	(0.025)
mhw24chage1						0.096	
						(0.029)**	
mj01						-0.022	
						(0.008)**	
rt04						-0.268	
						(0.164)	
rt05						-0.223	
						(0.153)	
rt32						0.432	
						(0.205)*	
v09						-0.004	

Continued on next page

Variables	1	21	22	31	32	4	5
						(0.003)	
v09_5						-0.162	
						(0.072)*	
v11						-0.034	
						(0.015)*	
v14g						0.011	
						(0.004)**	
v202						0.037	-0.051
						(0.025)	(0.024)*
inv_mult							-0.000
							(0.000)*
inv_otr							0.000
							(0.000)**
jfedu0							0.146
							(0.053)**
mhw20							-0.027
							(0.010)**
mj04chage3							-0.083
							(0.016)**
rt08							1.040
							(0.372)**
rt09							0.590
							(0.240)*
rt25							1.008
							(0.268)**
v07v09_1							-0.136
							(0.037)**
v07v09_8							0.373
							(0.144)**
v09_1							0.070
							(0.030)*
v09_8							-0.366
							(0.113)**
v14g2							0.221
							(0.097)*
_cons	2.580	2.061	2.514	2.370	2.557	2.837	2.089
	(0.041)**	(0.088)**	(0.057)**	(0.080)**	(0.078)**	(0.142)**	(0.082)**
<i>N</i>	287	614	290	366	382	386	530
<i>R</i> ²	0.37	0.21	0.37	0.20	0.26	0.40	0.30
<i>R</i> _a ²	0.32	0.17	0.33	0.14	0.18	0.31	0.26

* $p < 0.05$; ** $p < 0.01$

Tabla 10: Standardization logarithm of weight for height of the regions 6 to 11, GLS Regression Results

Variables	6	71	72	8	9	10	11
estrat_b	-0.006 (0.002)**	-0.042 (0.009)**	-0.051 (0.021)*			-0.021 (0.015)	
estrat_e	-0.033 (0.017)		0.041 (0.014)**				
jfedadchage0	-0.004 (0.001)**				0.006 (0.001)**		
jfedadchage2	-0.001 (0.001)					0.002 (0.001)*	
jfedadchage4	-0.002 (0.001)**						
jfedadjfedu1	0.003 (0.001)**		-0.002 (0.001)**	0.001 (0.001)			
jfedadjfedu2	0.007 (0.003)*					0.006 (0.003)*	
jfedadjfedu3	0.005 (0.003)	-0.005 (0.001)**					
jfedu1	-0.113 (0.055)*						
jfedu2	-0.212 (0.122)						
jfedu3	-0.198 (0.097)*	0.236 (0.056)**					
jfsex	-0.045 (0.025)	0.091 (0.026)**					
mb01	-0.011 (0.006)						
mh03	0.063 (0.014)**						
mh15	-0.091 (0.026)**						0.099 (0.036)**
mh16	-0.098 (0.029)**	-0.055 (0.022)*					0.077 (0.035)*
mh17	-0.078 (0.023)**	-0.075 (0.025)**					0.097 (0.035)**
mhm09	0.060 (0.027)*			0.020 (0.010)*			
mhm10	0.107 (0.024)**		0.019 (0.014)		-0.096 (0.024)**		
mhm25	-0.061 (0.029)*						
mhm26	-0.068					-0.011	

Continued on next page

Variables	6	71	72	8	9	10	11
	(0.024)**					(0.006)	
mhw20chage4	0.048					-0.015	
	(0.023)*					(0.010)	
mhw21chage2	0.218						
	(0.064)**						
mhw21chage3	0.078						
	(0.045)						
mhw22	0.104	0.053					
	(0.034)**	(0.024)*					
mhw23	0.084	0.109					
	(0.033)*	(0.032)**					
mhw23chage0	0.087	-0.072					
	(0.043)*	(0.024)**					
mhw23chage1	-0.095			0.110		0.123	
	(0.038)*			(0.044)*		(0.044)**	
mj03	-0.012	-0.017					
	(0.005)*	(0.004)**					
mj04chage0	0.063			0.091		-0.014	
	(0.028)*			(0.041)*		(0.009)	
rt15	-1.000						
	(0.281)**						
rt17	-0.542						
	(0.219)*						
rt24	0.886						
	(0.362)*						
rt25	0.653						
	(0.330)*						
rt28	-0.753						0.952
	(0.545)						(0.285)**
rt30	0.681						0.569
	(0.220)**						(0.151)**
v14g	-0.013						
	(0.005)**						
v14g3	0.118				-0.210		
	(0.038)**				(0.047)**		
v14g4	0.288	0.170					
	(0.095)**	(0.075)*					
v14g6	0.098	-0.046					
	(0.055)	(0.017)**					
v14g7	0.092					0.048	
	(0.033)**					(0.016)**	
v15v06_5	-0.104						
	(0.056)						
chsexchage3		0.058	-0.056				

Continued on next page

Variables	6	71	72	8	9	10	11
		(0.021)**	(0.027)*				
jfedadjfedu4		-0.002 (0.002)					
jfedu0mj03		0.035 (0.013)**		0.005 (0.010)			
jfedu1mj03		0.014 (0.005)**					
jfedu2mj03		0.009 (0.006)				-0.046 (0.023)*	
jfedu4		0.306 (0.084)**		0.288 (0.112)*			
jfedu4mj03		0.015 (0.008)					
jfedu5		0.277 (0.083)**		0.214 (0.066)**			
jfdi3		-0.023 (0.017)		-0.140 (0.063)*			
jfsexjfedu0		-0.083 (0.051)					-0.045 (0.024)
jfsexjfedu4		-0.117 (0.057)*		-0.116 (0.088)			
jfsexjfedu5		-0.160 (0.063)*			-0.139 (0.043)**		
mb02chage0		-0.004 (0.001)**		0.013 (0.005)**			
mb02chage1		-0.004 (0.002)**					
mh02		0.064 (0.017)**					
mh011		0.065 (0.019)**		0.013 (0.019)			
mh030		-0.058 (0.024)*					
mh006		-0.079 (0.020)**					
mh022chage1		0.039 (0.024)	0.058 (0.024)*				
mh023chage3		-0.047 (0.028)					
mh024chage1		0.067 (0.035)				0.308 (0.085)**	
mh024chage4		0.065 (0.028)*					
mj04		0.030					

Continued on next page

Variables	6	71	72	8	9	10	11
		(0.013)*					
rt19		0.289					
		(0.179)					
rt20		0.386					
		(0.196)*					
v06_1v07		0.105					-0.496
		(0.042)*					(0.106)**
v07v09_1		0.403	0.058	0.152			
		(0.139)**	(0.037)	(0.059)**			
v07v09_3		-0.326					
		(0.126)*					
v07v09_5		-0.096		0.302			
		(0.043)*		(0.065)**			
v07v09_7		-0.108					
		(0.046)*					
v08_2		0.047				-0.058	
		(0.013)**				(0.021)**	
v09_6		-0.081					
		(0.043)					
v15v16_1		0.125		0.056			
		(0.048)**		(0.038)			
v15v16_4		0.062	-0.084				
		(0.037)	(0.038)*				
v15v202		-0.090					
		(0.062)					
v15v206		-0.233	0.085				
		(0.112)*	(0.021)**				
v17		0.039				-0.028	
		(0.014)**				(0.013)*	
v202		0.101					
		(0.061)					
v206		0.217					
		(0.111)*					
chagejfedu1			0.031	0.011		0.018	
			(0.008)**	(0.016)		(0.005)**	
chsexchage4			0.031			0.043	
			(0.025)			(0.021)*	
estrat_n			-0.050			-0.025	
			(0.018)**			(0.015)	
jfedu5mj03			0.024				
			(0.010)*				
jfidi6			-0.219		-0.149		
			(0.132)		(0.071)*		
mh01			0.010				

Continued on next page

Variables	6	71	72	8	9	10	11
			(0.006)				
mh13			-0.027				0.076
			(0.010)**				(0.031)*
mhw20chage0			-0.001	-0.052	-0.148		
			(0.016)	(0.021)*	(0.031)**		
mhw21chage0			-0.062				-0.170
			(0.050)				(0.045)**
mhw24chage0			-0.067				
			(0.053)				
rt09			1.267				
			(0.445)**				
rt16			-1.184				
			(0.369)**				
rt31			-0.297				
			(0.273)				
v06_3			-0.055			0.479	
			(0.037)			(0.130)**	
v07v08_4			-0.156	-0.151			0.523
			(0.070)*	(0.076)*			(0.102)**
v09_1			-0.050				
			(0.022)*				
v16_4			0.034				
			(0.038)				
v18			-0.019	0.017			
			(0.007)**	(0.009)			
v201			0.040	0.083			
			(0.019)*	(0.028)**			
v203			0.035				
			(0.016)*				
chage1				0.251		-0.051	-0.039
				(0.096)**		(0.015)**	(0.018)*
chagejfedu2				0.015			
				(0.021)			
chagejfedu3				0.022	0.037		
				(0.018)	(0.013)**		
jfedadchage1				-0.004			
				(0.002)			
mb02				-0.022		-0.009	
				(0.006)**		(0.003)**	
mb02chage2				0.007			
				(0.004)			
mb02chage3				0.013			
				(0.004)**			
mh14				-0.020	0.062		0.083

Continued on next page

Variables	6	71	72	8	9	10	11
				(0.009)*	(0.012)**		(0.031)**
mhw20chage1				0.036			
				(0.024)			
mhw22chage3				-0.047			
				(0.036)			
mj04chage1				-0.091			
				(0.044)*			
rt23				-0.531	-1.374		0.605
				(0.304)	(0.312)**		(0.191)**
v06_2				0.084		-0.055	
				(0.049)		(0.031)	
v07v08_1				-0.160			0.498
				(0.055)**			(0.099)**
v07v08_2				-0.135		0.044	0.552
				(0.044)**		(0.022)*	(0.110)**
v09_5				-0.130			
				(0.046)**			
v1011_4				-0.211			
				(0.068)**			
v16				0.020			
				(0.011)			
chagejfedu5					0.052		
					(0.023)*		
chsexchage2					0.090	-0.036	
					(0.034)*	(0.023)	
jfedad					0.004		
					(0.001)*		
mh04					-0.285		
					(0.069)**		
mhw07					-0.125		
					(0.024)**		
mhw19chage2					0.036	-0.054	
					(0.017)*	(0.013)**	
mhw22chage0					-0.200		
					(0.039)**		
mhw22chage4					0.161		
					(0.061)**		
rt26					-0.851		
					(0.312)**		
rt33					-3.902	0.544	
					(1.096)**	(0.363)	
v08					-0.061		
					(0.017)**		
v14g2					0.178		

Continued on next page

Variables	6	71	72	8	9	10	11
					(0.063)**		
chage4						-0.103 (0.038)**	
chagejfedu4						-0.022 (0.014)	-0.033 (0.011)**
g01						0.008 (0.004)*	-0.086 (0.032)**
jfidi1						0.023 (0.012)	
jfsexjfedu1						-0.045 (0.013)**	-0.046 (0.022)*
jfyaredu						0.006 (0.002)*	
mb02chage4						0.010 (0.004)*	
mhw21chage1						-0.181 (0.056)**	
mhw21chage4						-0.109 (0.067)	
mj04chage4						0.025 (0.010)**	
v06						-0.044 (0.015)**	
v06_3v07						-0.546 (0.156)**	
v07v08_3						-0.224 (0.086)**	
v07v09_4						0.107 (0.073)	
v1011_7						0.017 (0.013)	
v11						-0.017 (0.014)	-0.144 (0.066)*
v14g8						0.140 (0.089)	
v15v06_4						-0.205 (0.121)	
v207						-0.102 (0.057)	
jfsexjfedu2							-0.092 (0.042)*
jfsexjfedu3							-0.055 (0.034)
v06_2v07							-0.515

Continued on next page

Variables	6	71	72	8	9	10	11
v06_4v07							(0.100)** -0.507
v06_5v07							(0.115)** -0.601
v10							(0.228)** 0.029
v1011_3							(0.014)* 0.117
v10_4							(0.060) 0.103
v10_5							(0.054) 0.052
v15v201							(0.024)* 0.041
_cons	2.693 (0.122)**	2.804 (0.129)**	3.780 (0.544)**	2.682 (0.119)**	3.033 (0.097)**	3.566 (0.545)**	3.227 (0.454)**
<i>N</i>	407	588	561	516	118	709	633
<i>R</i> ²	0.31	0.28	0.30	0.30	0.58	0.24	0.25
<i>R</i> _a ²	0.24	0.24	0.27	0.27	0.48	0.22	0.20

* $p < 0.05$; ** $p < 0.01$

Tabla 11: Standardization logarithm of weight for height of the regions 12 to 18, GLS Regression Results

Variables	12	13	14	15	16	17	18
chage	0.025 (0.006)**					-0.064 (0.016)**	
chagejfedu3	0.035 (0.017)*						
chagejfedu4	-0.038 (0.021)	0.027 (0.010)**	-0.024 (0.047)			0.075 (0.033)*	
chsexchage3	0.036 (0.027)		-0.066 (0.057)				
jfedu0mj03	0.007 (0.005)	0.018 (0.006)**					
jfedu1mj03	0.004 (0.003)			0.009 (0.003)**		-0.016 (0.007)*	
jfidi2	0.110 (0.067)						
jfidi3	-0.109 (0.043)*	0.040 (0.019)*			-0.037 (0.020)	0.284 (0.052)**	
jfsexjfedu5	0.117		-0.074				

Continued on next page

Variables	12	13	14	15	16	17	18
	(0.078)		(0.094)				
mhm25	-0.035 (0.011)**			0.039 (0.013)**			
mhm28	-0.104 (0.024)**		-0.007 (0.062)				-0.111 (0.052)*
mhw08	0.073 (0.051)	0.067 (0.028)*		0.206 (0.046)**			
mhw19chage1	-0.029 (0.012)*	-0.033 (0.014)*			-0.047 (0.014)**		
rt06	-0.380 (0.353)						
v1011_6	-0.086 (0.030)**				-0.036 (0.025)		
v10_1	0.088 (0.051)						
v11	0.112 (0.045)*						
v15v202	0.065 (0.026)*				0.097 (0.035)**		
v15v206	0.096 (0.046)*						-0.147 (0.105)
v16_4	0.023 (0.025)						
est_fla		0.025 (0.019)					
jfedadchage0		-0.002 (0.001)*	-0.003 (0.002)*				-0.001 (0.003)
jfedu5mj03		0.016 (0.005)**					
mhm12		-0.093 (0.033)**	0.047 (0.072)		0.081 (0.038)*		
mhw20chage0		0.041 (0.020)*				-0.060 (0.028)*	0.075 (0.031)*
mhw22chage2		0.071 (0.037)					
mj02		0.033 (0.007)**				-0.081 (0.024)**	
rt33		-0.598 (0.261)*					
v06_2v07		0.049 (0.016)**				0.277 (0.098)**	
v07v09_8		0.091 (0.038)*					
v09_7		-0.065					

Continued on next page

Variables	12	13	14	15	16	17	18
		(0.020)**					
v14g0		0.053					
		(0.019)**					
chage1			-0.212				
			(0.065)**				
chage3			0.108				
			(0.116)				
chsexchage1			0.063				
			(0.057)				
estrat_e			-0.096	-0.045			
			(0.070)	(0.029)			
estrat_n			0.031				-0.116
			(0.033)				(0.030)**
jfedadchage3			-0.003			0.003	
			(0.003)			(0.002)	
jfedadjfedu3			0.011			0.010	
			(0.016)			(0.002)**	
jfedu3			-0.216				
			(0.350)				
jfedu3mj03			-0.029				
			(0.038)				
jfsexjfedu2			0.047				
			(0.062)				
mb02			0.007		0.021	0.014	
			(0.009)		(0.006)**	(0.007)*	
mb02chage2			-0.006				
			(0.007)				
mh02			0.025	0.024			
			(0.017)	(0.010)*			
mhm11			0.029				
			(0.034)				
mhm27			-0.049				
			(0.056)				
mhw19			0.020				
			(0.017)				
mhw19chage4			-0.032	-0.149	-0.053		
			(0.027)	(0.018)**	(0.018)**		
mj04chage0			0.028	-0.318			
			(0.022)	(0.092)**			
rt16			0.418				
			(0.376)				
rt17			0.231				
			(0.328)				
v09_5			0.041			0.081	

Continued on next page

Variables	12	13	14	15	16	17	18
			(0.040)			(0.070)	
v1011_7			-0.043				
			(0.033)				
v1011_8			0.298				
			(0.171)				
v14g5			0.114				
			(0.150)				
v18			-0.013				
			(0.011)				
chagejfedu2				-0.040	0.019	0.123	
				(0.022)	(0.017)	(0.036)**	
chsexchage0				0.284		-0.188	
				(0.067)**		(0.064)**	
chsexchage2				0.084			
				(0.035)*			
jfedu2mj03				0.031			
				(0.011)**			
mb02chage0				-0.024	-0.016		
				(0.008)**	(0.003)**		
mb02chage4				0.031			
				(0.005)**			
mhw19chage2				-0.054		-0.047	
				(0.019)**		(0.022)*	
mhw21chage0				0.152			
				(0.100)			
mhw22chage4				-0.254	-0.082		
				(0.081)**	(0.048)		
mhw23chage0				0.362	0.149		
				(0.228)	(0.071)*		
mhw23chage4				-0.280			
				(0.156)			
rt11				0.441			1.337
				(0.225)			(0.356)**
v15				-0.068	-0.075	0.126	
				(0.029)*	(0.029)*	(0.053)*	
v17				-0.061			
				(0.025)*			
chage4					0.093		
					(0.043)*		
chsexchage4					-0.029		-0.182
					(0.040)		(0.064)**
jfedu0					-0.134		
					(0.093)		
jfidi6					0.107	0.355	

Continued on next page

Variables	12	13	14	15	16	17	18
					(0.063)	(0.129)**	
jfsexjfedu0					0.130	0.332	
					(0.065)*	(0.106)**	
mb01					-0.041		
					(0.011)**		
mh18					0.063		
					(0.052)		
mhm10					0.027		
					(0.013)*		
mhw05					0.008		
					(0.007)		
mhw22chage0					0.095		
					(0.043)*		
mj04					-0.010		
					(0.009)		
rt02					-0.492		
					(0.182)**		
rt05					-1.230		
					(0.463)**		
rt07					-0.518		
					(0.223)*		
rt13					-0.882		
					(0.495)		
rt18					2.188		
					(0.631)**		
rt31					-0.580		
					(0.323)		
v06_2					-0.040		
					(0.021)		
v06_3					-0.077	0.113	
					(0.026)**	(0.051)*	
v06_5v07					0.160		
					(0.119)		
v06_7					0.146		
					(0.084)		
v07v08_1					-0.071		
					(0.035)*		
v07v09_5					0.040		
					(0.031)		
v07v09_6					-0.055		
					(0.052)		
v08_4					-0.052		
					(0.020)*		
v1011_5					-0.040		

Continued on next page

Variables	12	13	14	15	16	17	18
					(0.022)		
v14g2					0.127		
					(0.096)		
v14g6					-0.139		
					(0.043)**		
v15v06_3					0.192		
					(0.057)**		
v15v06_7					-0.518		
					(0.203)*		
v201					0.026	0.152	
					(0.019)	(0.039)**	
v203					0.027		-0.086
					(0.019)		(0.038)*
v204					-0.079		
					(0.051)		
g01						0.016	
						(0.011)	
jfedadjfedu0						-0.001	0.006
						(0.002)	(0.004)
jfdi5						0.246	0.435
						(0.067)**	(0.171)*
jfsex						-0.295	
						(0.093)**	
jfsexjfedu1						0.327	
						(0.071)**	
mb02chage1						-0.010	
						(0.006)	
mhm09						-0.028	
						(0.013)*	
mhw06						0.110	
						(0.030)**	
mhw20chage1						-0.082	
						(0.029)**	
mhw20chage3						-0.090	0.020
						(0.033)**	(0.027)
mhw21chage4						-0.279	
						(0.087)**	
mhw22chage3						-0.126	
						(0.077)	
mhw23chage2						-0.586	
						(0.122)**	
mj01						0.050	
						(0.010)**	
mj04chage1						0.068	

Continued on next page

Variables	12	13	14	15	16	17	18
						(0.035)	
v07						-0.266	
						(0.066)**	
v08						-0.096	
						(0.021)**	
v08_2						-0.188	0.066
						(0.066)**	(0.050)
v15v201						-0.199	
						(0.069)**	
chage0							-0.192
							(0.127)
chagejfedu0							-0.307
							(0.079)**
chsex							0.058
							(0.034)
mhw21chage1							-0.121
							(0.089)
mhw22chage1							0.212
							(0.084)*
rt04							-2.056
							(0.529)**
_cons	1.582	2.338	2.628	2.524	2.939	2.389	2.838
	(0.365)**	(0.101)**	(0.277)**	(0.115)**	(0.127)**	(0.140)**	(0.142)**
<i>N</i>	740	280	453	283	734	223	142
<i>R</i> ²	0.14	0.33	0.28	0.37	0.23	0.49	0.68
<i>R</i> _a ²	0.11	0.24	0.23	0.31	0.18	0.38	0.62

* $p < 0.05$; ** $p < 0.01$

Tabla 12: Standardization logarithm of weight for age of the regions 1 to 5, GLS Regression Results

Variables	1	21	22	31	32	4	5
chsexchage0	0.084	-0.094	-0.187				-0.039
	(0.025)**	(0.029)**	(0.081)*				(0.024)
estrat_n	0.031				0.028		
	(0.011)**				(0.011)**		
jfedu4mj03	0.029		-0.051				
	(0.008)**		(0.024)*				
jfsexjfedu2	0.055						
	(0.042)						
mh18	0.033						
	(0.008)**						

Continued on next page

Variables	1	21	22	31	32	4	5
mhm12	-0.169 (0.042)**						
mhm26	-0.028 (0.008)**						
mhm29	-0.082 (0.020)**		-0.104 (0.070)				
mhw21chage2	-0.121 (0.061)*						
mhw22chage2	0.105 (0.039)**						
mhw23chage4	-0.116 (0.049)*				0.044 (0.026)	-0.109 (0.026)**	
rt16	-0.556 (0.227)*						
v07v09_3	-0.045 (0.030)						
v07v09_6	-0.105 (0.026)**					0.057 (0.035)	
v1011_9	0.160 (0.089)						-0.096 (0.049)
v11	-0.030 (0.015)*						
v14g6	0.350 (0.170)*						
v15	-0.068 (0.036)						
v15v202	0.077 (0.028)**						
v207	0.053 (0.020)**						0.040 (0.020)*
v208	0.150 (0.070)*					0.284 (0.054)**	
chage		-0.055 (0.015)**			-0.016 (0.007)*		
chage1		-0.237 (0.050)**				-0.076 (0.023)**	
chage2		-0.166 (0.033)**				-0.086 (0.019)**	
chage3		-0.111 (0.033)**				-0.064 (0.019)**	
chagejfedu0		-0.047 (0.019)*					
chagejfedu5		0.017					

Continued on next page

Variables	1	21	22	31	32	4	5
		(0.011)					
estrat_b		-0.029					
		(0.011)**					
g01		-0.069	0.077				
		(0.014)**	(0.027)**				
jfedad		0.002	0.008				0.001
		(0.001)**	(0.003)**				(0.001)
jfedadchage0		-0.004					
		(0.002)*					
jfedadjfedu2		-0.002	-0.008				
		(0.001)*	(0.003)*				
jfedadjfedu4		-0.002					
		(0.001)*					
jfedadjfedu5		-0.002					
		(0.001)*					
jfedu1		-0.118		0.126			
		(0.031)**		(0.057)*			
jfedu3		0.200		0.047			
		(0.086)*		(0.066)			
jfedu3mj03		-0.024					
		(0.007)**					
jfsexjfedu3		-0.212				-0.044	
		(0.071)**				(0.017)**	
mb01		-0.012		-0.010		0.020	
		(0.007)		(0.005)*		(0.005)**	
mh03		-0.038	-0.232				
		(0.017)*	(0.066)**				
mh14		0.077	-0.177				
		(0.013)**	(0.046)**				
mh15		0.066					
		(0.020)**					
mh16		0.087					
		(0.020)**					
mh17		0.081					
		(0.026)**					
mhm25		0.032					
		(0.011)**					
mhm30		0.080				-0.070	
		(0.036)*				(0.019)**	
mhw07		0.058		0.028			
		(0.025)*		(0.013)*			
mhw19chage1		0.035			-0.100		
		(0.018)			(0.020)**		
mhw19chage3		0.029					

Continued on next page

Variables	1	21	22	31	32	4	5
		(0.018)					
mhw20chage1		-0.031 (0.016)*	0.138 (0.058)*				-0.046 (0.014)**
mhw20chage3		-0.032 (0.018)	0.091 (0.056)	-0.031 (0.016)			
mhw20chage4		-0.037 (0.014)**	0.121 (0.056)*	-0.027 (0.017)			
mhw23		-0.040 (0.027)				0.042 (0.015)**	
mhw23chage1		0.051 (0.028)					
mhw23chage2		0.065 (0.027)*		0.063 (0.031)*			
mhw24		0.121 (0.032)**					
mhw24chage3		0.090 (0.041)*					
mj03		0.008 (0.006)					
rt05		0.183 (0.098)	1.439 (0.557)*				
rt31		0.520 (0.178)**			-0.822 (0.171)**		
v06_2v07		0.323 (0.091)**					
v07		-0.224 (0.083)**					
v07v09_5		-0.227 (0.093)*					
v09_5		0.210 (0.092)*		-0.052 (0.026)			
v15v06_1		0.372 (0.098)**					
v15v06_2		0.061 (0.041)	-0.085 (0.040)*				
v203		0.021 (0.013)					
chagejfedu2			0.070 (0.039)	-0.058 (0.018)**		-0.034 (0.012)**	
epis_d			-0.000 (0.000)**				
estab			0.014 (0.004)**				
estrat_e			-0.082		-0.077		

Continued on next page

Variables	1	21	22	31	32	4	5
			(0.041)*		(0.015)**		
jfsexjfedu1			0.070 (0.043)	-0.106 (0.046)*			
jfsexjfedu4			0.217 (0.084)*			-0.055 (0.019)**	
mh13			-0.143 (0.053)**				-0.038 (0.010)**
mhm09			0.122 (0.052)*				0.017 (0.009)*
mhm11			0.210 (0.083)*				
mhw06			-0.133 (0.054)*				
mhw19			0.120 (0.058)*			0.014 (0.008)	
mhw20chage0			0.219 (0.065)**				
mhw20chage2			0.095 (0.055)				-0.034 (0.013)**
rt02			1.391 (0.437)**				
v07v08_2			-0.404 (0.218)		-0.036 (0.017)*		-0.208 (0.081)*
v09_6			0.376 (0.236)	-0.052 (0.030)			
v1011_2			-0.110 (0.051)*			-0.039 (0.017)*	
v1011_6			-0.223 (0.070)**				
v14g7			-0.144 (0.056)*				
v16			-0.041 (0.021)	0.041 (0.015)**			
v18			-0.050 (0.019)*			-0.013 (0.005)**	
v204			0.251 (0.165)			0.113 (0.042)**	
v205			0.148 (0.085)				
chsexchage1				0.040 (0.025)	-0.055 (0.033)		
jfedadjfedu3				-0.001 (0.002)			
jfedu2				0.197			

Continued on next page

Variables	1	21	22	31	32	4	5
				(0.059)**			
jfedu2mj03				-0.024		0.018	
				(0.014)		(0.005)**	
jfedu5				0.068			
				(0.039)			
jfedu5mj03				-0.021			
				(0.012)			
jfidi3				-0.027			
				(0.019)			
jfidi6				-0.170			
				(0.077)*			
jfsex				0.048			
				(0.029)			
mb02chage4				0.009			
				(0.002)**			
mhw05				0.024			
				(0.009)**			
mhw19chage4				-0.053		-0.044	
				(0.018)**		(0.014)**	
mj04chage2				-0.050			
				(0.022)*			
v07v09_1				-0.082			
				(0.047)			
v07v09_2				-0.263			
				(0.130)*			
v09_7				-0.081			
				(0.051)			
v10				-0.030			
				(0.011)**			
v10_3				0.050			
				(0.026)			
v14g3				-0.059	-0.047	0.110	
				(0.025)*	(0.024)*	(0.056)	
v15v206				0.039			
				(0.019)*			
chsexchage4					0.066		
					(0.028)*		
jfidi2					0.056		0.082
					(0.032)		(0.039)*
jfyaredu					0.005		-0.014
					(0.002)**		(0.003)**
mb02chage1					0.007		
					(0.003)*		
mhw23chage0					0.105		

Continued on next page

Variables	1	21	22	31	32	4	5
					(0.038)**		
mhw24chage4					-0.082		
					(0.030)**		
mj04chage3					0.051		-0.025
					(0.020)*		(0.015)
rt09					0.714		
					(0.281)*		
v17					-0.046		-0.029
					(0.018)*		(0.015)
v201					0.059		
					(0.020)**		
v206					0.055		
					(0.017)**		
chagejfedu1						-0.023	-0.017
						(0.007)**	(0.007)*
jfdi1						-0.039	
						(0.017)*	
jfsexjfedu5						0.066	0.106
						(0.026)*	(0.023)**
mb02						-0.010	
						(0.003)**	
mhm10						-0.025	
						(0.010)**	
mhw22chage1						-0.058	
						(0.020)**	
mhw24chage1						0.059	
						(0.027)*	
mj02						0.020	
						(0.010)*	
mj04chage0						-0.131	
						(0.019)**	
v08_3						0.113	
						(0.038)**	
v11_8						-0.055	
						(0.022)*	
chsexchage3							-0.081
							(0.026)**
est_fila							-0.017
							(0.010)
jfedadjfedu0							-0.002
							(0.001)*
mh01							0.021
							(0.010)*
mhw21chage0							-0.125

Continued on next page

Variables	1	21	22	31	32	4	5
mhw23chage3							(0.049)* 0.072 (0.033)*
mj01							-0.025 (0.006)**
mj04chage1							0.019 (0.010)
rt10							-0.391 (0.150)**
v07v09_8							0.367 (0.149)*
v08_2							0.195 (0.080)*
v09_8							-0.382 (0.112)**
v1011_7							-0.270 (0.183)
v19							-0.021 (0.009)*
_cons	2.603 (0.112)**	2.936 (0.152)**	2.066 (0.277)**	2.289 (0.077)**	2.541 (0.053)**	2.551 (0.039)**	2.647 (0.053)**
<i>N</i>	284	614	288	366	376	386	525
<i>R</i> ²	0.36	0.26	0.21	0.25	0.32	0.39	0.27
<i>R</i> _a ²	0.31	0.20	0.09	0.18	0.28	0.34	0.23

* $p < 0.05$; ** $p < 0.01$

Tabla 13: Standardization logarithm of weight for age of the regions 6 to 11, GLS Regression Results

Variables	6	71	72	8	9	10	11
chagejfedu1	-0.024 (0.009)**					0.018 (0.005)**	
chagejfedu3	-0.025 (0.009)**						-0.027 (0.010)**
chagejfedu4	-0.017 (0.009)						-0.039 (0.012)**
chagejfedu5	-0.031 (0.015)*	0.037 (0.008)**		0.029 (0.012)*			
inv_infr	-0.000 (0.000)*						
jfedadchage0	-0.002 (0.001)**						
jfedu1mj03	0.009					-0.012	

Continued on next page

Variables	6	71	72	8	9	10	11
	(0.004)					(0.002)**	
jfedu5	0.177 (0.066)**						
jfdi1	0.092 (0.035)**						
jfdi3	0.061 (0.033)	-0.027 (0.016)					
jsexjfedu5	-0.105 (0.045)*	-0.054 (0.024)*					0.116 (0.048)*
mb02chage1	-0.007 (0.002)**						-0.008 (0.004)
mh15	-0.055 (0.019)**						
mhw06	-0.033 (0.011)**						
mhw19chage4	-0.026 (0.015)	-0.021 (0.009)*			-0.080 (0.022)**		
mhw20	0.032 (0.010)**						
mhw20chage2	-0.041 (0.014)**			-0.026 (0.012)*		0.023 (0.009)*	
mhw20chage3	-0.048 (0.015)**			-0.021 (0.013)		0.029 (0.009)**	
mhw21chage0	0.136 (0.063)*						-0.131 (0.039)**
mhw21chage1	0.120 (0.044)**				-0.277 (0.080)**	-0.092 (0.061)	
mhw21chage2	0.138 (0.051)**			-0.098 (0.045)*	0.135 (0.055)*		
mhw21chage3	0.094 (0.037)*						
mhw23chage0	0.139 (0.033)**						
mhw23chage3	0.092 (0.027)**						
mhw24	0.079 (0.018)**						
mhw24chage0	-0.109 (0.030)**						-0.219 (0.083)**
mhw24chage3	-0.048 (0.030)						
mj03	-0.010 (0.004)*						
tot_inv	0.000						

Continued on next page

Variables	6	71	72	8	9	10	11
	(0.000)*						
v06_2v07	-0.027 (0.019)						
v07v09_5	0.083 (0.033)*						
v08_1	-0.026 (0.015)				0.120 (0.024)**	0.087 (0.022)**	
v09_5	-0.073 (0.033)*			-0.041 (0.020)*			0.095 (0.038)*
v15v06_5	-0.113 (0.041)**		0.072 (0.031)*				
v15v201	0.031 (0.019)						0.058 (0.026)*
v202	-0.038 (0.022)	0.040 (0.017)*					
chsexchage1		-0.023 (0.017)					
jfedadjfedu3		-0.006 (0.001)**					
jfedu3mj03		-0.017 (0.006)**					0.017 (0.005)**
jfedu5mj03		-0.018 (0.006)**					-0.023 (0.011)*
jfsexjfedu3		0.140 (0.032)**					
mb02		0.004 (0.002)					
mh02		-0.018 (0.005)**					-0.022 (0.007)**
mh13		-0.018 (0.006)**	-0.020 (0.006)**				
mh12		-0.066 (0.033)*					
mh12		0.062 (0.015)**					
mh12		0.024 (0.013)					
mhw20chage0		0.037 (0.010)**	0.056 (0.011)**	-0.021 (0.015)			
rt07		0.332 (0.183)	0.450 (0.204)*				
rt22		-0.225 (0.093)*	-0.414 (0.167)*				
v06_3		0.118					

Continued on next page

Variables	6	71	72	8	9	10	11
		(0.076)					
v06_5		-0.047					
		(0.025)					
v07v08_2		0.025			0.153		-0.103
		(0.012)*			(0.046)**		(0.060)
v07v09_1		0.562	0.064				
		(0.125)**	(0.029)*				
v14g		0.006				0.011	
		(0.003)*				(0.002)**	
v14g6		-0.027	0.048				
		(0.016)	(0.021)*				
v14g8		0.059					
		(0.031)					
v15v16_7		-0.139		0.052	0.242		
		(0.075)		(0.074)	(0.096)*		
v19		0.013					
		(0.006)*					
chsex			-0.035				
			(0.013)**				
chsexchage4			0.072				
			(0.020)**				
estrat_b			-0.046				
			(0.017)**				
estrat_e			0.032				
			(0.011)**				
estrat_n			-0.059				
			(0.013)**				
mhm11			-0.044				
			(0.012)**				
mj04chage1			0.038	-0.162			
			(0.018)*	(0.029)**			
rt31			-0.388				
			(0.219)				
v06_7			0.262	0.134			
			(0.137)	(0.064)*			
v07v08_3			-0.130			-0.224	
			(0.067)			(0.100)*	
v07v08_4			-0.113				
			(0.053)*				
v09_1			-0.061				0.040
			(0.018)**				(0.036)
v1011_6			0.093				0.027
			(0.027)**				(0.015)
v15v06_3			-0.062				

Continued on next page

Variables	6	71	72	8	9	10	11
			(0.035)				
v15v16_4			-0.067		-0.056		
			(0.030)*		(0.031)		
v15v206			0.044				
			(0.016)**				
v16_4			0.100		0.195		
			(0.029)**		(0.058)**		
v203			0.044				
			(0.013)**				
chsexchage3				0.068		-0.057	
				(0.033)*		(0.024)*	
jfedadchage4				-0.002			
				(0.001)**			
mb02chage0				0.004			
				(0.003)			
mhw19chage0				-0.015			0.028
				(0.017)			(0.010)**
mhw22chage3				-0.064			
				(0.023)**			
mhw24chage1				-0.061			
				(0.037)			
mj04chage0				0.070		-0.037	0.035
				(0.029)*		(0.012)**	(0.014)*
mj04chage2				0.075			
				(0.031)*			
rt09				0.895			
				(0.355)*			
rt20				0.617			
				(0.247)*			
rt27				-0.976			
				(0.277)**			
v1011_4				-0.111			
				(0.047)*			
v15				0.072			
				(0.022)**			
v15v06_2				0.088			-0.055
				(0.032)**			(0.026)*
v18				0.015			
				(0.006)**			
jfedad					0.003		
					(0.001)**		
jfedadchage2					-0.003		
					(0.001)**		
jfedadchage3					-0.004		

Continued on next page

Variables	6	71	72	8	9	10	11
					(0.001)**		
jfedadjfedu2					0.004		
					(0.002)*		
jfedu2mj03					-0.061		
					(0.015)**		
jfidi6					-0.201		
					(0.067)**		
mhm10					-0.051		
					(0.020)*		
mhw22chage0					-0.058		
					(0.029)		
mhw22chage4					0.111		
					(0.056)*		
mhw23chage1					-0.183		
					(0.056)**		
rt01					-0.628		
					(0.241)*		
rt13					-0.721	-2.051	
					(0.446)	(0.695)**	
v09_6					-0.106		
					(0.033)**		
v1011_2					0.087		
					(0.024)**		
chage0						0.162	
						(0.020)**	
jfsex						-0.070	0.071
						(0.018)**	(0.035)*
mhw07						0.039	-0.023
						(0.012)**	(0.014)
mhw19chage2						-0.021	
						(0.010)*	
mj02						0.010	
						(0.007)	
rt04						0.906	
						(0.396)*	
rt08						-0.444	
						(0.194)*	
rt16						-0.507	
						(0.139)**	
rt32						-0.687	
						(0.300)*	
v06_6						-0.178	
						(0.105)	
v15v06_4						-0.365	

Continued on next page

Variables	6	71	72	8	9	10	11
						(0.140)**	
v17						-0.021	
						(0.015)	
v201						-0.023	
						(0.013)	
jfedadchage1							0.002
							(0.001)
jfedu1							0.121
							(0.053)*
jfsexjfedu1							-0.091
							(0.045)*
jfsexjfedu4							0.088
							(0.035)*
mb01							0.020
							(0.005)**
mb02chage2							-0.006
							(0.002)**
mb02chage3							-0.005
							(0.002)*
mhw08							-0.074
							(0.030)*
mhw21chage4							-0.069
							(0.034)*
mhw23chage4							-0.124
							(0.056)*
mj01							-0.009
							(0.003)**
rt19							0.479
							(0.194)*
rt23							-0.390
							(0.144)**
v08_2							0.095
							(0.044)*
v09_2							0.078
							(0.047)
v1011_7							0.033
							(0.017)
v10_7							0.102
							(0.062)
v14g3							0.065
							(0.031)*
v14g7							0.023
							(0.014)
v208							0.219

Continued on next page

Variables	6	71	72	8	9	10	11
_cons	2.464 (0.046)**	2.439 (0.044)**	3.708 (0.451)**	2.331 (0.051)**	2.346 (0.090)**	2.588 (0.069)**	2.256 (0.064)**
<i>N</i>	411	588	561	517	118	728	633
<i>R</i> ²	0.29	0.27	0.30	0.24	0.56	0.23	0.23
R2_A	0.22	0.23	0.27	0.20	0.45	0.21	0.18

* $p < 0.05$; ** $p < 0.01$

Tabla 14: Standardization logarithm of weight for age of the regions
12 to 18, GLS Regression Results

Variables	12	13	14	15	16	17	18
chage2	-0.047 (0.020)*					0.050 (0.028)	
chsex	-0.021 (0.017)		-0.066 (0.019)**			-0.090 (0.025)**	0.036 (0.028)
chsexchage3	0.035 (0.028)	0.074 (0.027)**				0.098 (0.045)*	
estrat_b	0.055 (0.020)**						
estrat_n	0.036 (0.012)**			-0.029 (0.013)*	0.025 (0.014)		
g01	-0.032 (0.010)**		0.036 (0.009)**				
jfedu0mj03	0.015 (0.004)**	0.015 (0.006)**					
jfedu3mj03	0.015 (0.007)*						
jfedu4mj03	-0.031 (0.014)*						
jfsexjfedu2	0.046 (0.027)						0.135 (0.084)
mh14	0.122 (0.043)**				0.007 (0.004)		
mh16	0.120 (0.050)*				0.036 (0.014)*		
mh18	0.065 (0.035)						
mhm26	-0.113 (0.041)**						
mhm28	-0.132 (0.055)*		-0.049 (0.029)				
mhw05	-0.089						-0.019

Continued on next page

Variables	12	13	14	15	16	17	18
	(0.040)*						(0.012)
mhw06	-0.085						
	(0.041)*						
mhw07	-0.074						
	(0.041)						
mhw19	0.113						
	(0.042)**						
mhw19chage1	-0.038						
	(0.010)**						
mhw20chage3	-0.013			-0.043		-0.070	
	(0.011)			(0.015)**		(0.022)**	
mhw21	0.115						-0.055
	(0.053)*						(0.038)
mhw21chage2	-0.186						
	(0.084)*						
mhw23	0.182						
	(0.064)**						
mj04chage4	-0.016						
	(0.011)						
rt01	0.813						
	(0.202)**						
rt02	0.816						
	(0.202)**						
rt06	0.858						
	(0.402)*						
rt13	2.260				0.640		
	(0.581)**				(0.330)		
rt22	1.976						
	(0.845)*						
rt23	2.358						
	(0.891)**						
rt24	2.238						
	(0.881)*						
rt25	1.859		-0.441				
	(0.933)*		(0.193)*				
rt27	-1.122						
	(0.433)**						
v07v08_1	-0.067			0.051			
	(0.028)*			(0.030)			
v08_1	0.046					0.089	
	(0.022)*					(0.048)	
v10_5	-0.075						
	(0.025)**						
v11_6	-0.136					-0.219	

Continued on next page

Variables	12	13	14	15	16	17	18
	(0.039)**					(0.049)**	
v14g0	0.280						
	(0.063)**						
v14g1	0.314						
	(0.114)**						
v14g3	0.230						
	(0.075)**						
v14g5	0.312						
	(0.077)**						
v14g6	0.267				-0.105		
	(0.074)**				(0.033)**		
v14g7	0.298	-0.062				0.047	0.046
	(0.063)**	(0.021)**				(0.023)*	(0.025)
v15	0.096					0.075	-0.053
	(0.034)**					(0.041)	(0.043)
v15v06_2	-0.076						
	(0.032)*						
v15v06_5	-0.102						
	(0.051)*						
v15v202	0.059		-0.110				
	(0.027)*		(0.066)				
v15v206	0.071						
	(0.042)						
chage		-0.033					
		(0.011)**					
chagejfedu4		0.031					
		(0.010)**					
estrat_e		-0.040	-0.125				
		(0.018)*	(0.039)**				
est_fila		0.075					
		(0.021)**					
jfedadchage4		0.003		0.002	0.001		-0.003
		(0.001)**		(0.001)*	(0.000)**		(0.001)*
jfedu2		0.052			0.371		
		(0.026)*			(0.126)**		
mb02chage0		0.004				0.013	
		(0.003)				(0.004)**	
mhm12		-0.058					
		(0.033)					
mhm30		0.091					
		(0.030)**					
mhw20chage2		0.026					-0.020
		(0.010)*					(0.016)
mhw22chage3		0.078					

Continued on next page

Variables	12	13	14	15	16	17	18
		(0.036)*					
mhw23chage0		-0.170			0.086		
		(0.057)**			(0.053)		
mj04		0.037					
		(0.007)**					
mj04chage0		-0.033	0.084				
		(0.017)*	(0.018)**				
rt29		-0.291					
		(0.193)					
rt32		-0.801					
		(0.247)**					
v08_2		-0.133					
		(0.063)*					
v1011_1		0.076					
		(0.050)					
v16_1		-0.058					
		(0.017)**					
v207		0.113					
		(0.049)*					
chage3			0.130				
			(0.065)*				
chsexchage4			0.114			0.163	
			(0.033)**			(0.042)**	
jfedadchage3			-0.003			0.003	
			(0.002)*			(0.001)**	
jfdi1			0.198				
			(0.106)				
jfdi3			0.264				
			(0.112)*				
mh01			-0.058				
			(0.015)**				
mhm29			-0.084				
			(0.053)				
mj01			0.015				
			(0.008)				
mj02			-0.051			-0.054	
			(0.016)**			(0.012)**	
mj04chage2			0.034				
			(0.016)*				
mj04chage3			0.029				
			(0.018)				
rt28			0.423				
			(0.301)				
v07v08_4			-0.147				

Continued on next page

Variables	12	13	14	15	16	17	18
			(0.042)**				
v07v09_1			0.081		-0.108		
			(0.037)*		(0.042)**		
v08_4			0.083				
			(0.036)*				
v09			0.026				
			(0.009)**				
v1011_8			0.334				-0.172
			(0.106)**				(0.046)**
v10_6			-0.033				
			(0.021)				
v201			0.068			0.039	
			(0.023)**			(0.029)	
v202			0.090				
			(0.062)				
chage0				-0.208			
				(0.064)**			
chsexchage1				-0.054			-0.144
				(0.040)			(0.048)**
mh02				0.030			
				(0.011)**			
mh03				0.032			-0.018
				(0.017)			(0.019)
mh13				0.024			
				(0.012)*			
mhw08				0.108			
				(0.047)*			
mhw19chage2				-0.056			
				(0.020)**			
mhw19chage4				-0.126			0.008
				(0.023)**			(0.023)
mhw20chage0				0.146			
				(0.042)**			
rt07				0.578			
				(0.330)			
rt11				0.332			
				(0.236)			
v07				0.075	0.337		
				(0.028)**	(0.098)**		
v1011_5				0.194			
				(0.115)			
v15v201				-0.070	-0.032	-0.071	0.137
				(0.032)*	(0.019)	(0.052)	(0.057)*
v17				-0.059			-0.103

Continued on next page

Variables	12	13	14	15	16	17	18
				(0.026)*			(0.038)**
v203				0.040	0.018		-0.076
				(0.023)	(0.014)		(0.028)**
jfedadchage0					0.002		
					(0.000)**		
jfedadjfedu2					-0.008	-0.013	
					(0.004)*	(0.004)**	
jfedadjfedu3					-0.004		
					(0.003)		
jfedu1					0.055		
					(0.031)		
jfedu1mj03					-0.008		
					(0.003)**		
jfedu3					0.171		
					(0.097)		
jfdi6					0.126	0.171	
					(0.041)**	(0.092)	
jfsexjfedu0					0.048		
					(0.025)		
mhw22chage0					-0.058		
					(0.034)		
mhw22chage4					-0.088		
					(0.040)*		
mhw23chage2					0.165	-0.197	
					(0.057)**	(0.092)*	
mhw24chage1					0.177		
					(0.112)		
v06_1v07					-0.285		
					(0.099)**		
v06_2					-0.083		
					(0.033)*		
v06_2v07					-0.238		
					(0.093)*		
v06_3					-0.167		
					(0.036)**		
v06_3v07					-0.185		
					(0.095)		
v06_4v07					-0.308		
					(0.185)		
v06_5					-0.091	-0.071	
					(0.033)**	(0.023)**	
v06_6					-0.083		
					(0.042)*		
v06_7					-0.170		

Continued on next page

Variables	12	13	14	15	16	17	18
					(0.059)**		
v09_1					0.094		
					(0.033)**		
v09_2					0.165		
					(0.089)		
v09_5					0.049		
					(0.023)*		
v15v06_3					0.191		
					(0.044)**		
chagejfedu2						0.133	-0.102
						(0.051)**	(0.037)**
jfdi2						0.157	
						(0.073)*	
mb01						0.053	0.022
						(0.012)**	(0.008)**
mb02						-0.024	
						(0.006)**	
mhw21chage4						-0.182	0.190
						(0.065)**	(0.133)
v1011_6						-0.073	
						(0.026)**	
v10_2						-0.156	
						(0.040)**	
v10_4						-0.103	
						(0.041)*	
jfdi5							0.199
							(0.123)
mb02chage1							0.002
							(0.004)
rt20							-1.961
							(0.612)**
_cons	-2.502	2.321	2.378	2.185	2.197	2.411	2.554
	(1.106)*	(0.119)**	(0.200)**	(0.095)**	(0.062)**	(0.044)**	(0.058)**
<i>N</i>	741	282	449	281	734	224	142
<i>R</i> ²	0.25	0.34	0.29	0.30	0.18	0.41	0.54
<i>R</i> _a ²	0.19	0.28	0.25	0.25	0.14	0.33	0.45

* $p < 0.05$; ** $p < 0.01$

Tabla 15: Standardization logarithm of height for age of the regions 1 to 5, GLS Regression Results

Variables	1	21	22	31	32	4	5
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Continued on next page

Variables	1	21	22	31	32	4	5
chagejfedu5	0.007 (0.003)*					0.012 (0.005)*	
chsexchage3	-0.038 (0.010)**						
jfedu3mj03	0.006 (0.002)**	-0.005 (0.001)**	0.008 (0.002)**				
jfedu4mj03	0.006 (0.003)						-0.011 (0.004)**
jfsex	0.019 (0.007)**						-0.024 (0.008)**
mb02chage0	0.003 (0.001)**						
mhm12	-0.059 (0.016)**				-0.035 (0.013)**		
mhm29	-0.031 (0.007)**						
mhw05	0.008 (0.004)*	-0.010 (0.002)**					-0.027 (0.006)**
mhw06	0.005 (0.004)						
mhw19	-0.016 (0.005)**						
mhw23chage3	0.034 (0.021)					0.024 (0.011)*	
mhw24	0.022 (0.005)**						
mhw24chage2	-0.015 (0.010)						
mhw24chage4	-0.025 (0.009)**						
rt07	-0.223 (0.071)**						
v07v09_5	0.020 (0.006)**						
v207	0.018 (0.007)**						
v208	0.095 (0.025)**					-0.050 (0.024)*	
chsexchage0		-0.019 (0.009)*	-0.043 (0.013)**				
chsexchage2		-0.019 (0.007)**	-0.037 (0.011)**				
jfedadchage0		0.001			0.001		0.001

Continued on next page

Variables	1	21	22	31	32	4	5
		(0.000)**			(0.000)**		(0.000)**
jfidi3		0.011 (0.005)*				0.017 (0.006)**	
jfsexjfedu1		-0.018 (0.005)**					0.016 (0.005)**
mh04		0.020 (0.009)*		0.011 (0.007)			
mh14		0.005 (0.002)*					-0.012 (0.005)*
mhm11		-0.008 (0.005)					
mhw23chage2		0.011 (0.007)					-0.028 (0.009)**
mhw24chage1		0.023 (0.009)*		-0.037 (0.009)**			
mhw24chage3		0.040 (0.013)**				0.030 (0.013)*	
rt22		0.081 (0.034)*	-0.162 (0.064)*				
rt29		0.365 (0.140)**					
rt31		0.230 (0.065)**					0.219 (0.056)**
v14g3		0.019 (0.010)			-0.021 (0.007)**		
v14g5		0.011 (0.005)*					
v17		0.016 (0.005)**	0.020 (0.008)*				
chagejfedu4			-0.014 (0.006)*				
jfedadjfedu4			0.002 (0.001)**				-0.001 (0.000)*
jfedu1mj03			0.005 (0.002)**				
mhm30			0.024 (0.012)				
mj02			0.036 (0.008)**		0.036 (0.010)**		-0.022 (0.006)**
mj04chage1			-0.052 (0.009)**				
mj04chage2			-0.031 (0.012)*				
mj04chage3			-0.066		0.016		

Continued on next page

Variables	1	21	22	31	32	4	5
			(0.010)**		(0.006)*		
mj04chage4			-0.041				
			(0.009)**				
rt23			-0.217				
			(0.102)*				
v07v09_2			-0.103				
			(0.047)*				
v07v09_3			0.025	0.029			
			(0.010)*	(0.012)*			
v09_2			0.098				
			(0.039)*				
v1011_6			-0.021				
			(0.009)*				
v15v06_2			-0.020			-0.026	
			(0.007)**			(0.010)*	
v18			-0.010	0.005		-0.007	
			(0.003)**	(0.002)*		(0.003)*	
v201			0.029	0.011	0.017		
			(0.014)*	(0.007)	(0.006)**		
chagejfedu0				0.069			0.017
				(0.017)**			(0.005)**
chsexchage4				0.021			
				(0.009)*			
jfsexjfedu0				-0.084			
				(0.023)**			
mh01				-0.006		0.007	
				(0.002)*		(0.004)	
mhw19chage1				0.011		0.019	
				(0.006)		(0.009)*	
mhw19chage3				0.013			
				(0.006)*			
mhw20chage0				0.025		0.024	
				(0.005)**		(0.006)**	
mhw20chage3				-0.016		0.022	
				(0.006)*		(0.006)**	
mhw21chage0				0.071			
				(0.014)**			
rt12				-0.457			
				(0.133)**			
rt21				0.198			
				(0.061)**			
rt25				-0.253			
				(0.095)**			
rt28				-0.133			

Continued on next page

Variables	1	21	22	31	32	4	5
				(0.076)			
v07v08_3				0.019			
				(0.010)			
v07v09_4				0.046			
				(0.020)*			
v07v09_7				-0.046		-0.112	
				(0.016)**		(0.032)**	
v07v09_8				0.098			
				(0.046)*			
v14g1				0.015		-0.018	
				(0.007)*		(0.007)*	
v15v206				0.019			0.022
				(0.006)**			(0.006)**
chagejfedu2					-0.005		
					(0.003)		
mb02					0.002		
					(0.001)**		
mh13					-0.011		
					(0.003)**		
mhm26					-0.004		
					(0.003)		
mhw20chage2					-0.010		
					(0.004)**		
mhw21chage3					-0.059		0.057
					(0.026)*		(0.020)**
mhw24chage0					-0.034		-0.022
					(0.013)*		(0.008)**
mj04					-0.029		0.013
					(0.008)**		(0.005)**
rt02					-0.074		
					(0.025)**		
v07v08_1					0.031		
					(0.010)**		
v08_1					-0.024		
					(0.010)*		
v09_7					0.025		
					(0.014)		
v1011_5					-0.066		
					(0.021)**		
v14g2					-0.038		
					(0.016)*		
v15v06_5					0.034		
					(0.024)		
v16					0.035		

Continued on next page

Variables	1	21	22	31	32	4	5
					(0.018)		
v16_1					0.088		
					(0.054)		
v206					0.010		
					(0.005)*		
chage1						-0.052	
						(0.017)**	
chage2						-0.061	
						(0.026)*	
chage3						-0.036	
						(0.012)**	
chsexchage1						0.057	
						(0.018)**	
g01						-0.014	0.017
						(0.003)**	(0.005)**
jfedadjfedu5						-0.001	
						(0.000)	
jfsexjfedu2						0.023	0.041
						(0.009)*	(0.014)**
mb02chage2						0.003	
						(0.002)	
mh03						0.012	-0.020
						(0.004)**	(0.005)**
mhw19chage0						0.021	
						(0.008)**	
mhw19chage2						0.015	-0.010
						(0.007)*	(0.004)**
mhw22						0.013	0.014
						(0.005)*	(0.005)**
mhw23chage0						0.027	-0.036
						(0.012)*	(0.011)**
mj04chage0						-0.031	
						(0.009)**	
v06						0.016	
						(0.010)	
v07						0.044	
						(0.020)*	
v07v09_1						-0.065	
						(0.025)**	
v09						0.013	
						(0.005)**	
v09_3						-0.065	
						(0.022)**	
v09_5						-0.087	

Continued on next page

Variables	1	21	22	31	32	4	5
						(0.025)**	
v09_6						-0.079	
						(0.031)*	
v19						0.010	
						(0.005)	
v204						0.038	
						(0.019)	
v205						-0.021	
						(0.008)*	
estrat_e							-0.012
							(0.004)**
jfedadchage3							0.001
							(0.000)
jfedu2mj03							-0.008
							(0.003)*
jfsexjfedu4							0.053
							(0.016)**
jfsexjfedu5							0.031
							(0.006)**
mb02chage3							-0.003
							(0.001)**
mh02							-0.023
							(0.005)**
mh17							0.024
							(0.006)**
mhm25							-0.027
							(0.005)**
mhw20							0.014
							(0.006)*
mhw21							-0.049
							(0.015)**
mhw21chage1							0.056
							(0.020)**
mhw21chage2							0.063
							(0.021)**
mhw21chage4							0.056
							(0.021)**
mhw23chage1							-0.020
							(0.010)
rt05							0.100
							(0.056)
rt11							0.171
							(0.052)**
rt18							-0.184

Continued on next page

Variables	1	21	22	31	32	4	5
v10_6							(0.117)
							-0.109
							(0.055)*
_cons	4.388	4.329	4.471	4.417	4.272	4.379	4.402
	(0.013)**	(0.020)**	(0.042)**	(0.016)**	(0.072)**	(0.027)**	(0.023)**
<i>N</i>	285	616	289	366	379	386	531
<i>R</i> ²	0.46	0.28	0.30	0.35	0.42	0.34	0.43
<i>R</i> _a ²	0.42	0.26	0.24	0.30	0.38	0.27	0.39

* $p < 0.05$; ** $p < 0.01$

Tabla 16: Standardization logarithm of height for age of the regions 6 to 11, GLS Regression Results

Variables	6	71	72	8	9	10	11
estrat_b	0.001						
	(0.001)						
g01	-0.007						-0.003
	(0.002)**						(0.001)**
jfedadchage0	0.001						
	(0.000)**						
jfedadchage3	-0.000						
	(0.000)*						
jfedu1	-0.038			0.071			
	(0.018)*			(0.020)**			
jfedu1mj03	0.004				0.008		
	(0.002)				(0.003)*		
jfedu5	-0.023						
	(0.017)						
jfedu5mj03	0.009	-0.003	-0.013				
	(0.005)	(0.002)*	(0.005)**				
jfsexjfedu1	0.018			-0.039			
	(0.012)			(0.012)**			
mb01	0.006	0.004		0.006		0.004	0.004
	(0.003)	(0.001)**		(0.002)*		(0.002)*	(0.002)**
mb02	-0.005						
	(0.002)*						
mhw06	-0.008						
	(0.005)						
mhw21chage0	0.069					-0.068	
	(0.029)*					(0.019)**	
mhw23chage3	0.036						
	(0.014)**						
mj02	-0.017						

Continued on next page

Variables	6	71	72	8	9	10	11
	(0.007)*						
rt08	-0.364						
	(0.236)						
rt10	0.402						
	(0.168)*						
rt14	0.316					-0.392	
	(0.135)*					(0.162)*	
rt15	0.337						
	(0.104)**						
rt25	-0.324			-0.719		0.148	
	(0.136)*			(0.190)**		(0.062)*	
rt27	-0.198						
	(0.116)						
rt28	-0.443						
	(0.153)**						
v14g3	-0.036						
	(0.014)*						
v16_4	0.027						
	(0.011)*						
v19	0.013						
	(0.004)**						
chage0		0.058	0.060			0.070	
		(0.018)**	(0.009)**			(0.005)**	
mb02chage0		-0.002			0.002		0.003
		(0.001)			(0.001)*		(0.001)**
mhm25		-0.006			0.030	-0.005	
		(0.002)**			(0.009)**	(0.002)*	
mhw20chage0		0.012			0.015		
		(0.005)**			(0.009)		
mhw21chage3		0.034					
		(0.016)*					
mhw22chage3		-0.015					
		(0.007)*					
mhw24chage0		-0.024					
		(0.010)*					
mhw24chage1		-0.026	-0.043				
		(0.009)**	(0.019)*				
mj04chage2		-0.021					
		(0.007)**					
mj04chage3		-0.023	-0.011				
		(0.011)*	(0.006)*				
rt04		0.098					
		(0.042)*					
rt07		0.194					

Continued on next page

Variables	6	71	72	8	9	10	11
		(0.065)**					
rt22		-0.097					0.047
		(0.033)**					(0.026)
rt29		0.422					
		(0.136)**					
v06		-0.008		0.007			
		(0.002)**		(0.003)*			
v06_3		0.058					
		(0.026)*					
v06_5v07		0.063					
		(0.033)					
v07v09_1		0.130				-0.007	
		(0.045)**				(0.004)*	
v1011_6		-0.039					
		(0.023)					
v14g		0.004				0.002	
		(0.001)**				(0.001)*	
v15v16_7		-0.063					
		(0.026)*					
v15v206		0.139					
		(0.032)**					
v202		0.012					
		(0.006)*					
v205		0.012		-0.021			
		(0.006)*		(0.014)			
v206		-0.135			0.023		
		(0.032)**			(0.009)*		
chagejfedu0			-0.011				
			(0.006)				
chagejfedu5			0.016	0.019			
			(0.006)*	(0.007)**			
chsexchage0			-0.034				
			(0.010)**				
jfedadjfedu3			0.000	0.001			
			(0.000)*	(0.000)**			
jfedadjfedu5			-0.002				
			(0.001)**				
jfsexjfedu0			0.029				
			(0.009)**				
jfsexjfedu5			0.047				
			(0.025)				
mh01			-0.002				
			(0.001)				
mhw20chage3			0.006				

Continued on next page

Variables	6	71	72	8	9	10	11
			(0.003)				
mhw22chage1			-0.026				
			(0.007)**				
mhw23chage0			0.009				
			(0.008)				
mhw24			0.021				
			(0.010)*				
mj04chage0			0.037				
			(0.010)**				
mj04chage1			0.020				
			(0.007)**				
rt02			0.114				
			(0.037)**				
rt06			0.183				
			(0.071)*				
rt09			0.201				
			(0.086)*				
v14g4			-0.037				
			(0.021)				
v14g5			0.019				
			(0.010)*				
v14g6			0.021				
			(0.008)**				
v15v06_3			-0.024				
			(0.013)				
v16			0.009				
			(0.002)**				
v203			0.009				
			(0.005)*				
chage				-0.015			
				(0.003)**			
chage1				-0.068			
				(0.011)**			
chage2				-0.029			
				(0.009)**			
chagejfedu4				0.017			
				(0.005)**			
est_fila				0.025			-0.014
				(0.010)*			(0.007)*
inv_mult				0.000			
				(0.000)**			
jfedadjfedu0				0.001			
				(0.000)			
jfedu2				0.064			

Continued on next page

Variables	6	71	72	8	9	10	11
				(0.016)**			
mb02chage3				-0.002			
				(0.001)			
mh14				0.006			
				(0.002)**			
mhw23chage1				-0.025			
				(0.012)*			
rt13				-0.311			
				(0.144)*			
rt18				-1.179			
				(0.232)**			
rt23				0.165			-0.138
				(0.094)			(0.046)**
v07v09_5				-0.040			
				(0.011)**			
v08				-0.010			
				(0.004)**			
v1011_8				-0.162			
				(0.106)			
v14g2				-0.037			
				(0.020)			
v15v06_1				0.041			
				(0.013)**			
chagejfedu1					-0.012	0.004	
					(0.005)*	(0.001)**	
chagejfedu3					-0.018		
					(0.005)**		
chsex					-0.038		
					(0.013)**		
chsexchage4					0.050		
					(0.018)**		
estrat_n					-0.010	-0.006	
					(0.005)*	(0.005)	
jfdi2					-0.036		
					(0.023)		
mh13					-0.012		
					(0.006)		
mh16					0.013		
					(0.005)*		
mhm30					-0.023		
					(0.009)*		
mhw19chage1					-0.026		
					(0.009)**		
mj01					-0.006	-0.004	

Continued on next page

Variables	6	71	72	8	9	10	11
					(0.003)	(0.001)**	
v09					-0.003		
					(0.002)		
v11_7					0.022		
					(0.009)*		
v14g7					-0.038		0.012
					(0.010)**		(0.005)*
estrat_e						-0.013	-0.008
						(0.007)	(0.005)
inv_prod						-0.000	
						(0.000)	
jfedu0mj03						0.004	
						(0.001)**	
jfdi3						0.009	
						(0.004)*	
jfsex						-0.011	
						(0.006)*	
mh02						-0.004	
						(0.002)	
mhw20						0.004	
						(0.002)*	
mhw21chage4						0.039	
						(0.022)	
rt16						-0.111	
						(0.044)*	
rt32						-0.162	
						(0.086)	
v07v09_4						-0.046	
						(0.026)	
v08_1						0.019	-0.016
						(0.007)**	(0.007)*
v1011_9						0.035	
						(0.015)*	
mb02chage1							0.003
							(0.001)**
mh15							-0.009
							(0.004)*
mhm10							-0.007
							(0.004)
mhw19chage0							0.012
							(0.004)**
mhw20chage4							0.008
							(0.002)**
rt11							0.055

Continued on next page

Variables	6	71	72	8	9	10	11
							(0.042)
v06_7							-0.065 (0.023)**
v07							-0.019 (0.007)**
v07v08_1							0.030 (0.009)**
v07v08_3							0.214 (0.050)**
v09_2							0.022 (0.011)
v09_5							0.017 (0.006)**
v1011_1							-0.082 (0.019)**
v1011_7							0.014 (0.006)*
v15v06_2							-0.025 (0.007)**
v15v16_1							0.012 (0.008)
v16_1							-0.013 (0.005)**
v201							-0.015 (0.006)*
v207							0.034 (0.015)*
v208							0.100 (0.033)**
_cons	4.470 (0.041)**	4.382 (0.017)**	4.299 (0.023)**	4.344 (0.040)**	4.464 (0.020)**	4.481 (0.034)**	4.488 (0.041)**
<i>N</i>	410	588	561	513	118	728	634
<i>R</i> ²	0.22	0.39	0.38	0.33	0.60	0.37	0.34
<i>R</i> _a ²	0.17	0.36	0.34	0.27	0.51	0.35	0.31

* $p < 0.05$; ** $p < 0.01$

Tabla 17: Standardization logarithm of height for age of the regions
12 to 18, GLS Regression Results

Variables	12	13	14	15	16	17	18
chage	-0.019 (0.003)**	-0.019 (0.005)**			-0.013 (0.002)**	0.035 (0.008)**	
chage1	-0.027				-0.038		

Continued on next page

Variables	12	13	14	15	16	17	18
	(0.013)*				(0.006)**		
chage2	-0.047				-0.047		
	(0.007)**				(0.014)**		
chsexchage0	-0.034		-0.037	-0.054			0.009
	(0.009)**		(0.016)*	(0.019)**			(0.033)
chsexchage1	-0.019		-0.026	-0.030		-0.052	-0.092
	(0.009)*		(0.010)**	(0.015)*		(0.020)**	(0.023)**
estrat_n	0.005	0.014			0.011		-0.010
	(0.003)	(0.010)			(0.005)*		(0.012)
jfedu1mj03	-0.003						
	(0.001)**						
mhw19chage0	-0.010		-0.015				0.024
	(0.005)*		(0.009)				(0.013)
mhw19chage1	-0.011		0.009				
	(0.005)*		(0.004)*				
mhw20chage3	-0.009						
	(0.002)**						
mhw21chage2	-0.059					-0.062	
	(0.021)**					(0.039)	
mj04	0.005						
	(0.002)*						
rt22	0.335						
	(0.110)**						
rt23	0.211			0.327			
	(0.107)*			(0.101)**			
rt24	0.448			0.333			
	(0.121)**			(0.088)**			
rt29	0.587	-0.563					
	(0.182)**	(0.203)**					
v06_3	-0.111				0.021		
	(0.046)*				(0.011)		
v1011_8	0.016		0.077				
	(0.008)*		(0.035)*				
v11_7	0.010						
	(0.004)*						
v14g	-0.014		0.001			0.006	0.004
	(0.003)**		(0.001)			(0.002)**	(0.002)
v14g1	0.069						
	(0.026)**						
v14g3	0.042						
	(0.015)**						
v14g5	0.087	0.106					
	(0.021)**	(0.038)**					
v14g6	0.090				-0.024		

Continued on next page

Variables	12	13	14	15	16	17	18
	(0.023)**				(0.011)*		
v14g7	0.112						
	(0.023)**						
v15v206	0.023						
	(0.009)*						
v16_2	0.129						
	(0.048)**						
v204	-0.029						
	(0.013)*						
chagejfedu4		0.014					
		(0.005)*					
estrat_b		-0.013					
		(0.007)					
jfedadchage1		-0.001		0.001			
		(0.000)**		(0.000)**			
jfedadjfedu0		0.001					
		(0.000)*					
jfedadjfedu2		-0.001		-0.001	-0.002	-0.002	
		(0.001)		(0.000)**	(0.001)	(0.001)*	
jfedu1		0.023					
		(0.012)					
jfedu2		0.096			0.095		
		(0.039)*			(0.041)*		
jfsexjfedu3		0.041					-0.121
		(0.013)**					(0.075)
jfsexjfedu5		0.044					
		(0.013)**					
mb02chage0		-0.003					
		(0.002)*					
mb02chage2		-0.005			0.003	-0.007	
		(0.001)**			(0.002)	(0.002)**	
mhw19chage4		0.021	0.011				
		(0.006)**	(0.004)**				
mhw20chage1		0.009					
		(0.005)					
mhw20chage2		0.009					
		(0.005)					
mhw21chage4		0.051					0.136
		(0.024)*					(0.071)
mhw24chage4		-0.080					
		(0.033)*					
rt01		-0.202			-0.243		
		(0.058)**			(0.052)**		
rt02		0.120					

Continued on next page

Variables	12	13	14	15	16	17	18
		(0.057)*					
rt08		0.286					
		(0.127)*					
rt11		-0.278					
		(0.101)**					
rt25		0.392					
		(0.133)**					
rt28		0.219					
		(0.093)*					
v07v08_4		0.019	-0.011				
		(0.007)**	(0.006)				
v07v09_3		-0.094					
		(0.029)**					
v09_7		0.027					
		(0.009)**					
v15v16_1		-0.026					
		(0.008)**					
v15v202		0.013					
		(0.009)					
v17		0.008			0.013		
		(0.007)			(0.005)*		
v203		-0.015					
		(0.008)					
v207		0.059					
		(0.019)**					
chage0			0.081				
			(0.020)**				
jfedad			-0.001				
			(0.000)*				
jfidi2			-0.048				
			(0.029)				
mh03			0.006				
			(0.004)				
mhw08			0.036				
			(0.012)**				
mhw19			-0.014				
			(0.004)**				
rt16			-0.262				
			(0.065)**				
rt17			-0.188		-0.223		
			(0.060)**		(0.071)**		
v1011_5			-0.034		-0.010		
			(0.020)		(0.007)		
v201			0.025	-0.014			

Continued on next page

Variables	12	13	14	15	16	17	18
			(0.007)**	(0.009)			
g01				0.031		-0.008	
				(0.006)**		(0.002)**	
jfedadchage0				-0.001			0.001
				(0.001)			(0.001)
jfedadchage4				0.000			
				(0.000)*			
jfedu0mj03				0.004			
				(0.002)*			
jfedu3				0.094			
				(0.021)**			
jfdi4				-0.053			
				(0.028)			
mb02				0.003	-0.003		
				(0.002)	(0.001)		
mh01				-0.019			
				(0.006)**			
mh04				-0.017			
				(0.012)			
mh14				-0.011			
				(0.004)**			
mh16				-0.075			
				(0.016)**			
mh17				-0.043			
				(0.014)**			
mhm25				-0.009			
				(0.005)			
mhw20chage0				0.081		0.022	
				(0.015)**		(0.008)**	
mhw22				0.049			
				(0.023)*			
mhw22chage0				0.062	-0.027		
				(0.036)	(0.011)*		
mhw22chage4				0.043		0.056	
				(0.027)		(0.030)	
mj01				0.007			
				(0.003)*			
mj03				-0.010			
				(0.003)**			
mj04chage0				0.069			
				(0.022)**			
mj04chage1				-0.020			
				(0.008)*			
mj04chage2				0.021			

Continued on next page

Variables	12	13	14	15	16	17	18
				(0.009)*			
v06				-0.064	-0.017		
				(0.012)**	(0.004)**		
v06_2v07				0.044			
				(0.011)**			
v06_4				0.143	0.055		
				(0.032)**	(0.025)*		
v06_5				0.160	0.056	-0.025	
				(0.047)**	(0.017)**	(0.010)*	
v06_6				0.195	0.084		
				(0.060)**	(0.022)**		
v07v08_1				0.048			
				(0.014)**			
v07v09_5				-0.056	-0.039		
				(0.018)**	(0.021)		
v08				0.008		-0.061	
				(0.004)		(0.012)**	
v08_2				0.012			
				(0.010)			
v09_5				0.057			
				(0.017)**			
v1011_1				-0.045			
				(0.024)			
v19				-0.018			-0.017
				(0.006)**			(0.017)
estrat_e					-0.010		
					(0.004)*		
jfsex					0.009		
					(0.008)		
mb01					0.009	0.021	
					(0.003)**	(0.004)**	
rt03					-0.634		
					(0.123)**		
rt04					-0.561		
					(0.115)**		
rt13					0.863		
					(0.203)**		
rt21					-0.727		
					(0.281)**		
rt31					0.279		
					(0.105)**		
rt32					0.186		
					(0.085)*		
v06_2					0.011		

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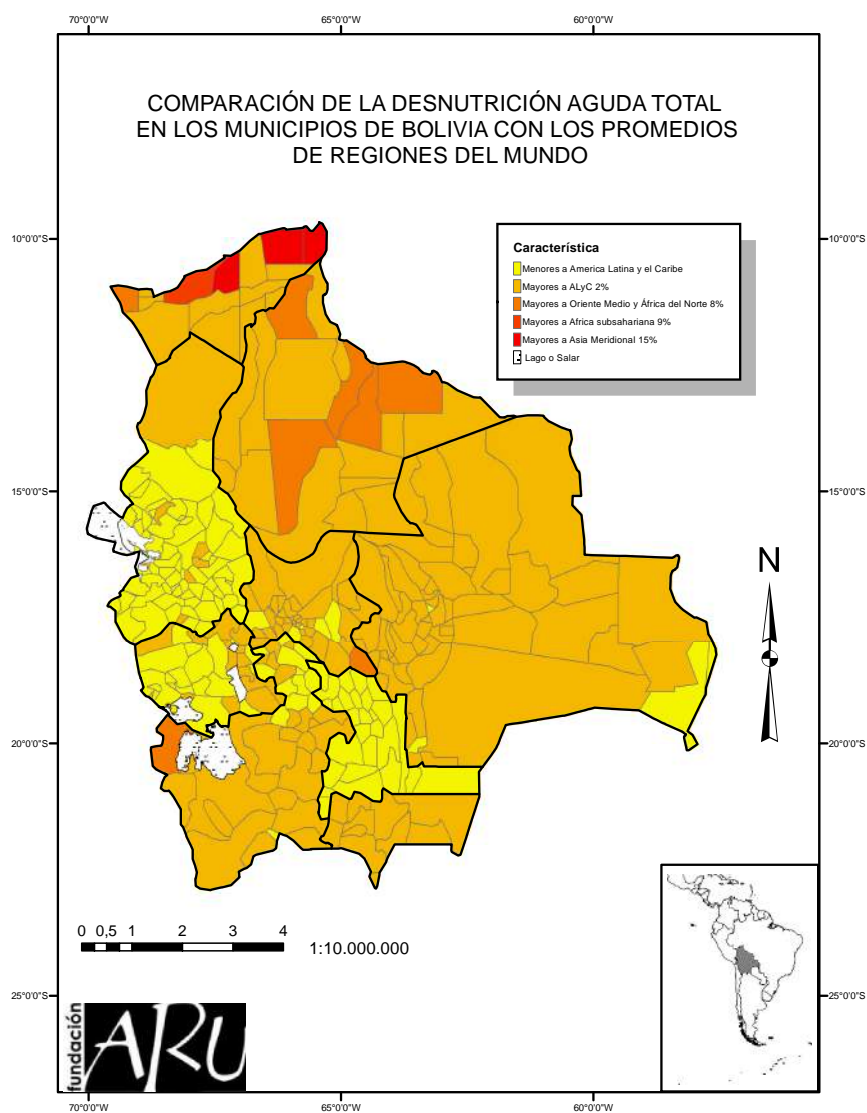
Variables	12	13	14	15	16	17	18
					(0.008)		
v07					0.061		
					(0.020)**		
v07v09_1					-0.056		
					(0.021)**		
v07v09_7					-0.057		
					(0.022)**		
v08_4					0.017	0.150	
					(0.006)**	(0.029)**	
v09_6					-0.041	0.095	
					(0.017)*	(0.100)	
v10_3					0.090		
					(0.037)*		
v10_6					-0.011		
					(0.008)		
v11					0.010		
					(0.005)		
v14g2					-0.041		
					(0.025)		
v15					0.039		
					(0.008)**		
v15v06_7					0.183		
					(0.052)**		
v15v201					-0.034		
					(0.009)**		
v208					0.041		
					(0.013)**		
est_fila						-0.041	
						(0.020)*	
jfedu3mj03						-0.012	0.008
						(0.004)**	(0.012)
jfdi3						-0.053	
						(0.013)**	
jfsexjfedu1						-0.027	
						(0.009)**	
mb02chage3						-0.009	
						(0.003)**	
mb02chage4						-0.013	
						(0.003)**	
mhm09						0.009	
						(0.004)*	
mhw21						0.043	
						(0.025)	
mhw21chage1						-0.067	

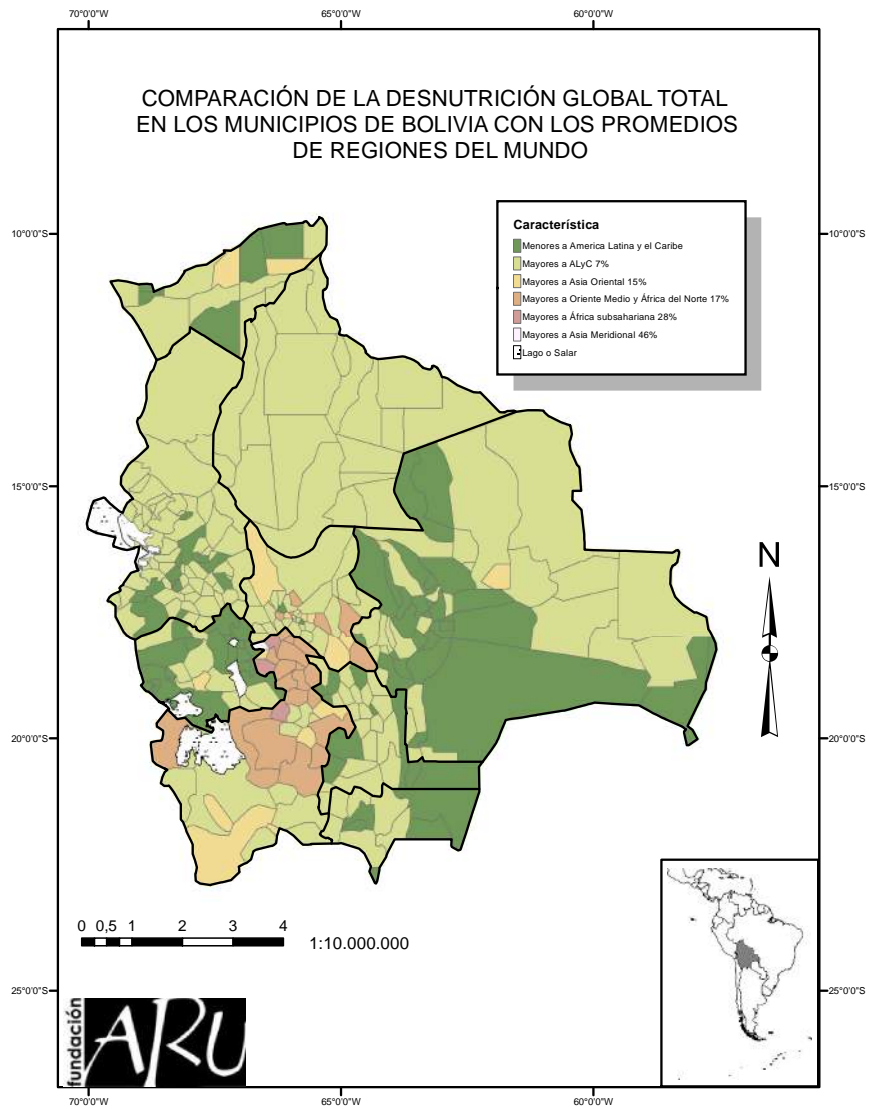
Continued on next page

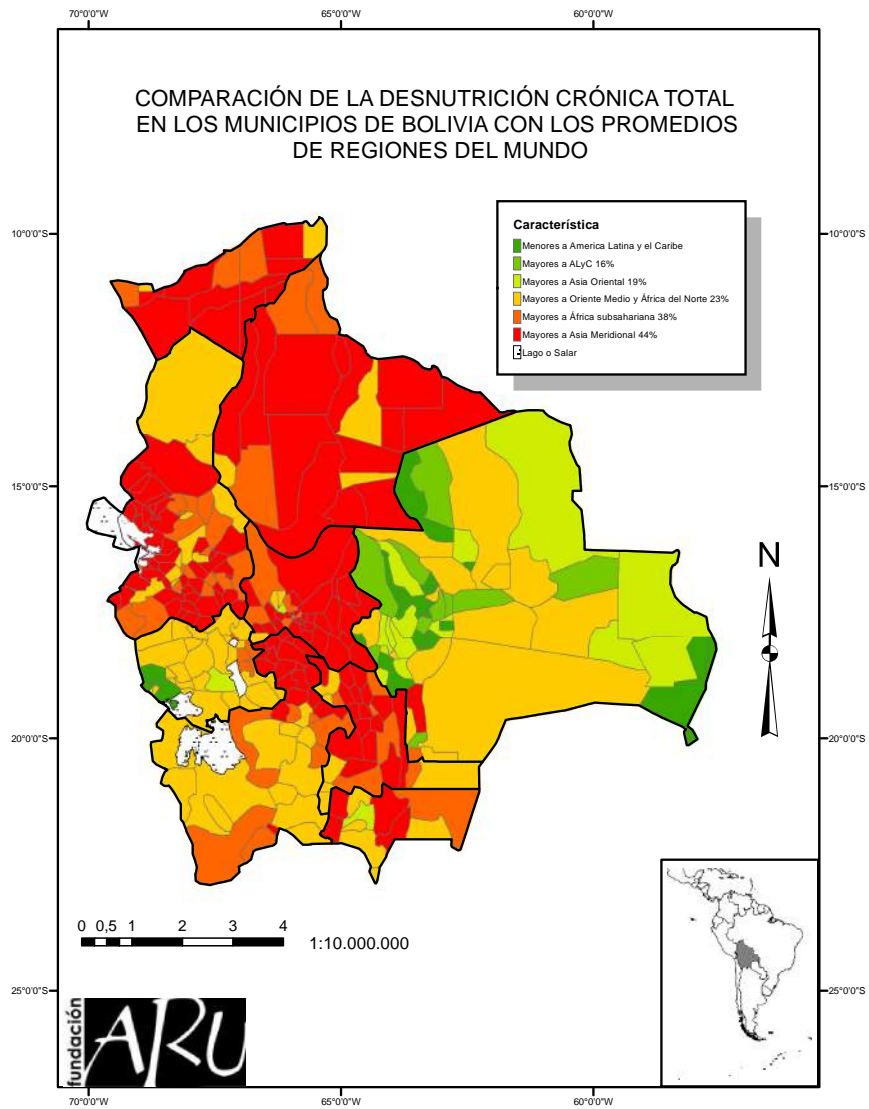
Variables	12	13	14	15	16	17	18
						(0.033)*	
mhw21chage3						-0.074	
						(0.038)	
v10						0.012	
						(0.003)**	
v1011_2						0.035	
						(0.020)	
v15v06_1						-0.080	
						(0.039)*	
jfedadjfedu3							0.007
							(0.002)**
jfedu0							0.073
							(0.051)
jfsexjfedu4							0.040
							(0.019)*
mhm10							0.019
							(0.016)
mhw05							-0.014
							(0.006)*
mhw23chage1							0.067
							(0.034)
v1011_6							0.033
							(0.029)
v1011_7							0.044
							(0.022)
_cons	4.075	4.752	4.456	4.241	4.481	4.621	4.387
	(0.110)**	(0.230)**	(0.024)**	(0.048)**	(0.050)**	(0.106)**	(0.049)**
<i>N</i>	743	279	449	282	732	221	142
<i>R</i> ²	0.38	0.36	0.29	0.52	0.34	0.48	0.59
<i>R</i> _a ²	0.31	0.28	0.26	0.43	0.30	0.41	0.52

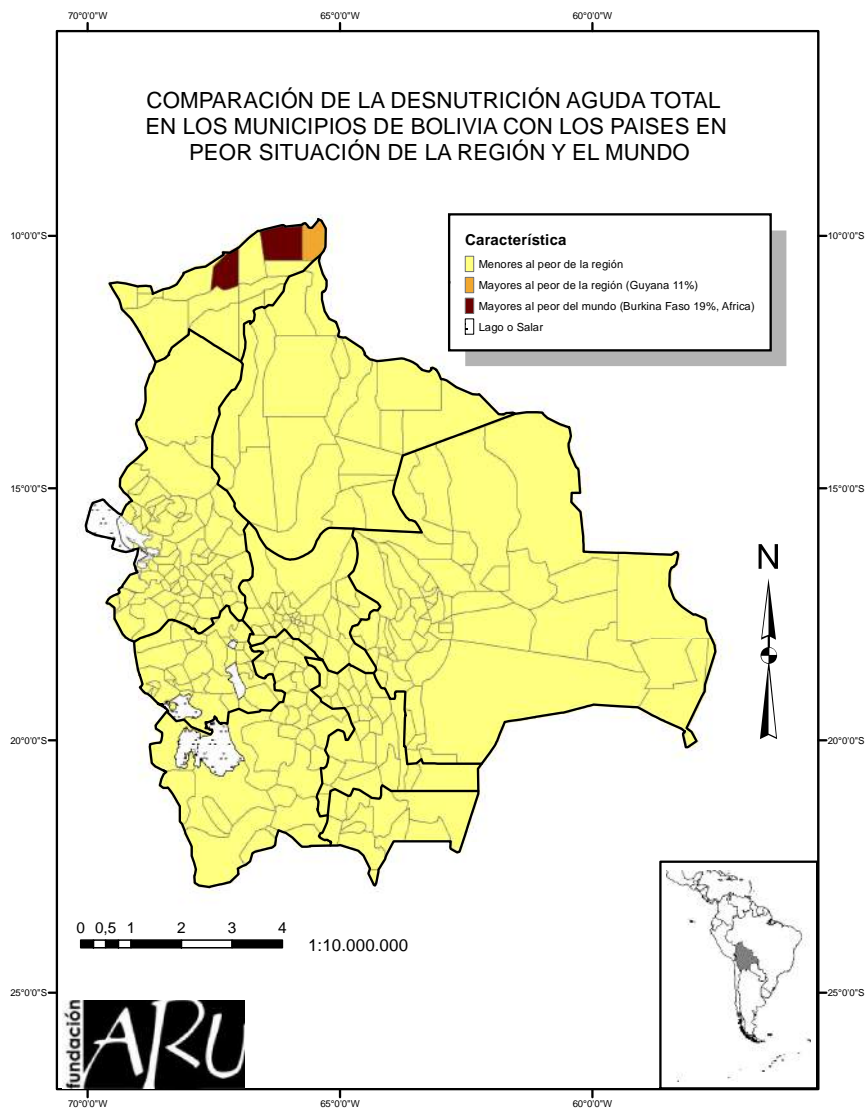
* $p < 0.05$; ** $p < 0.01$

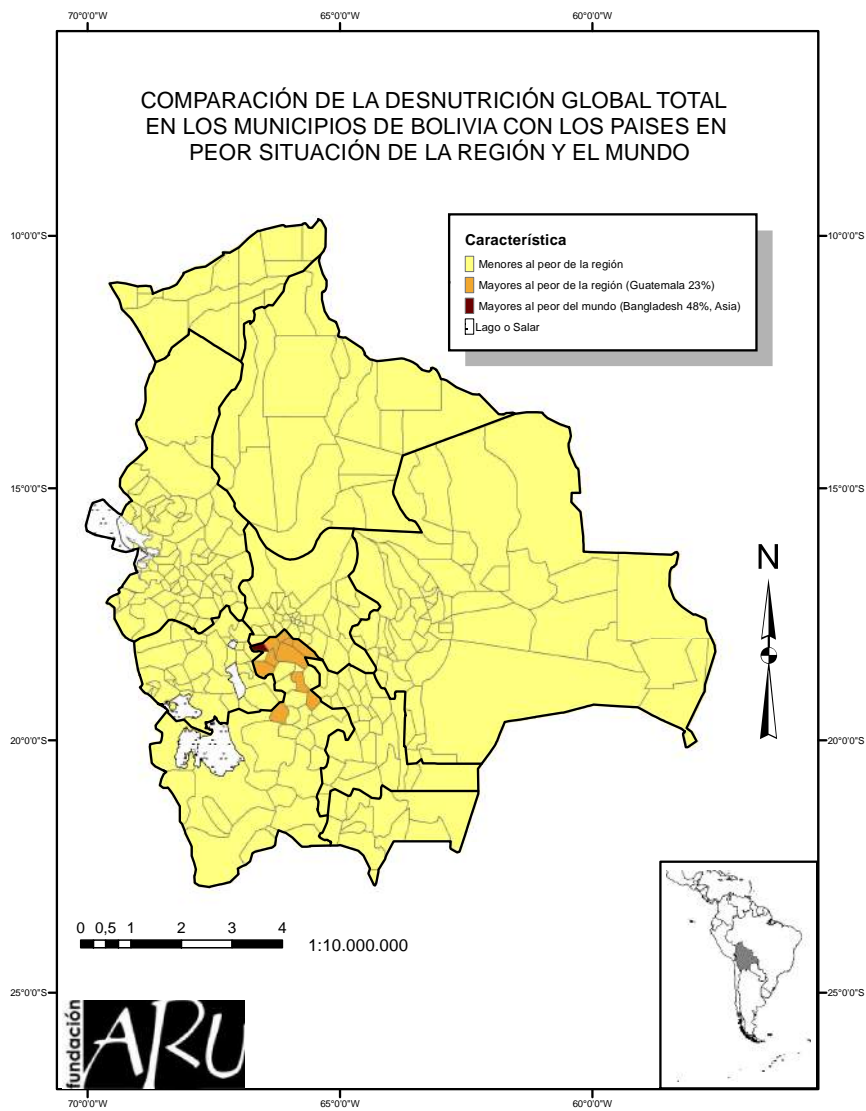
A. Mapas municipales de los indicadores de desnutrición comparando con regiones del mundo

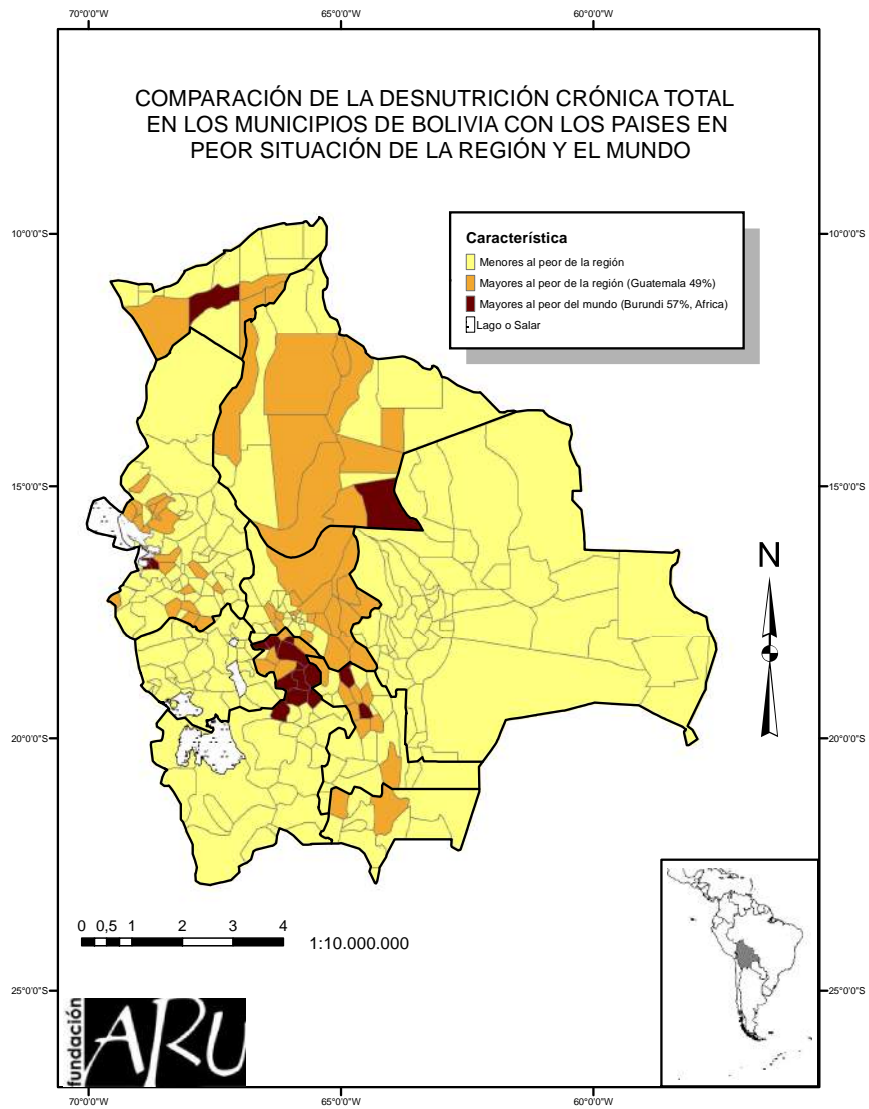




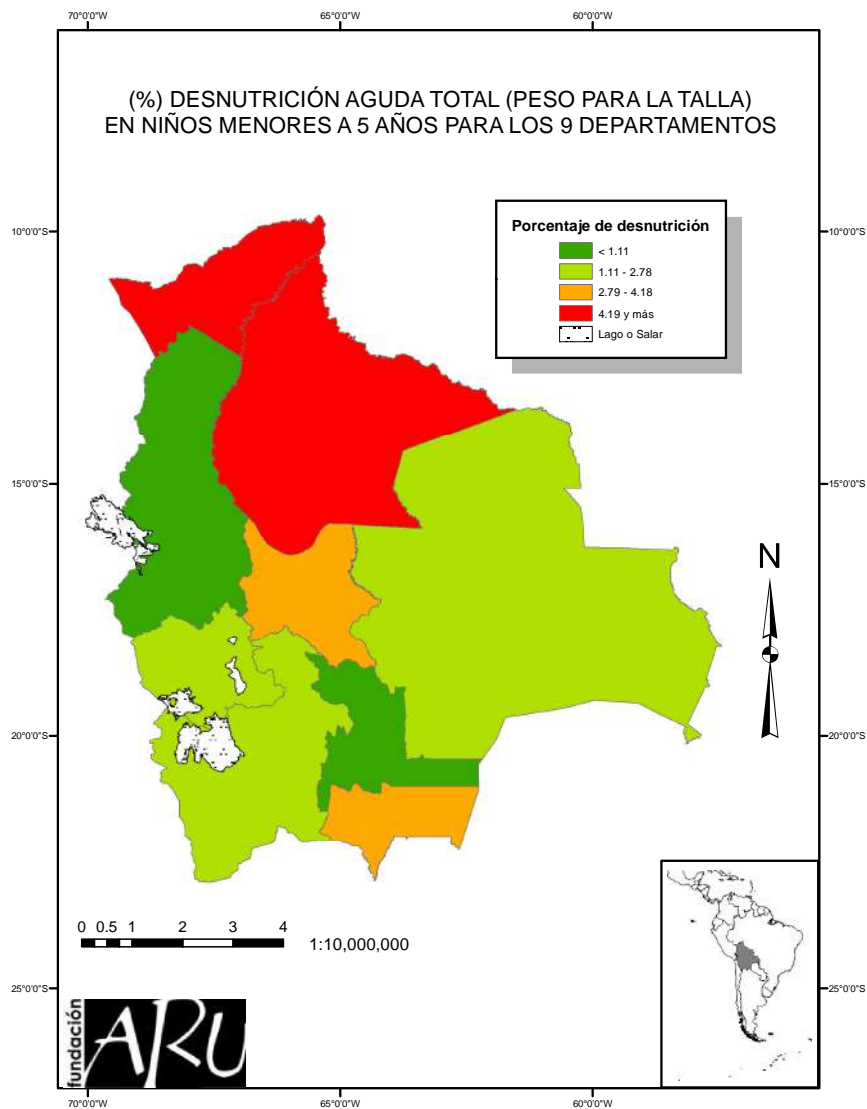


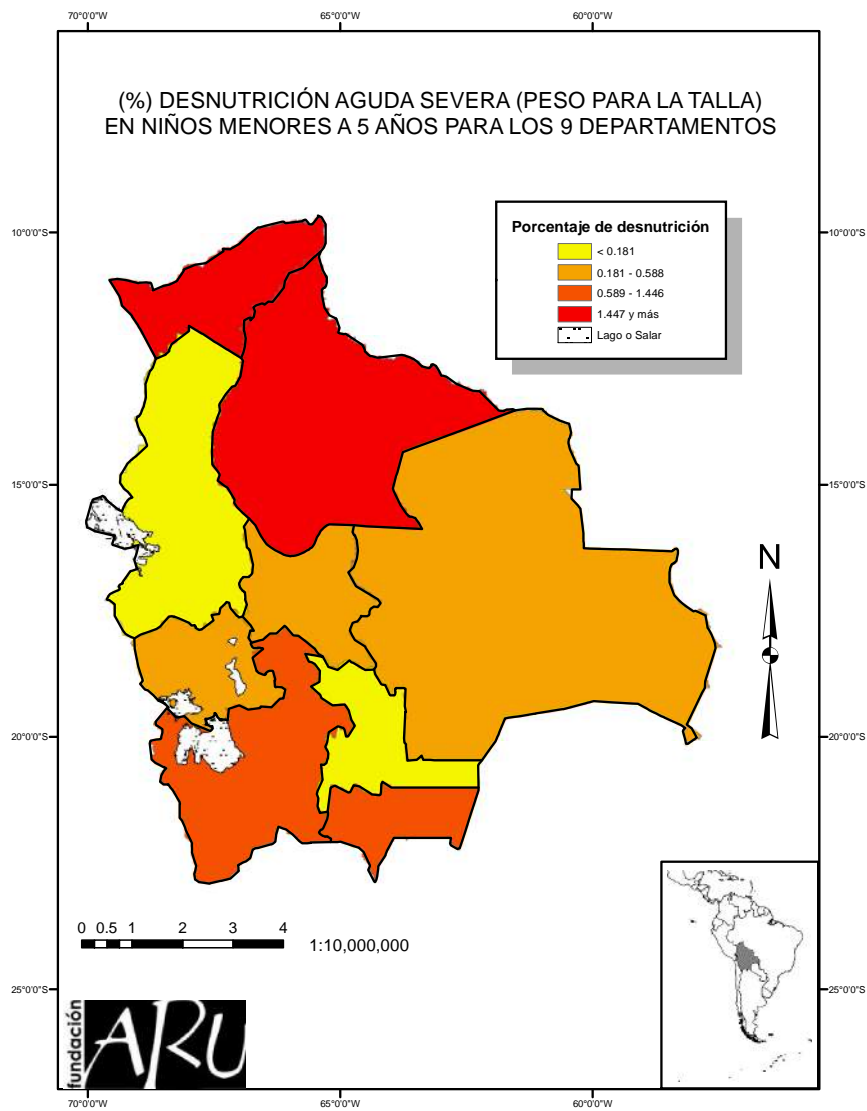


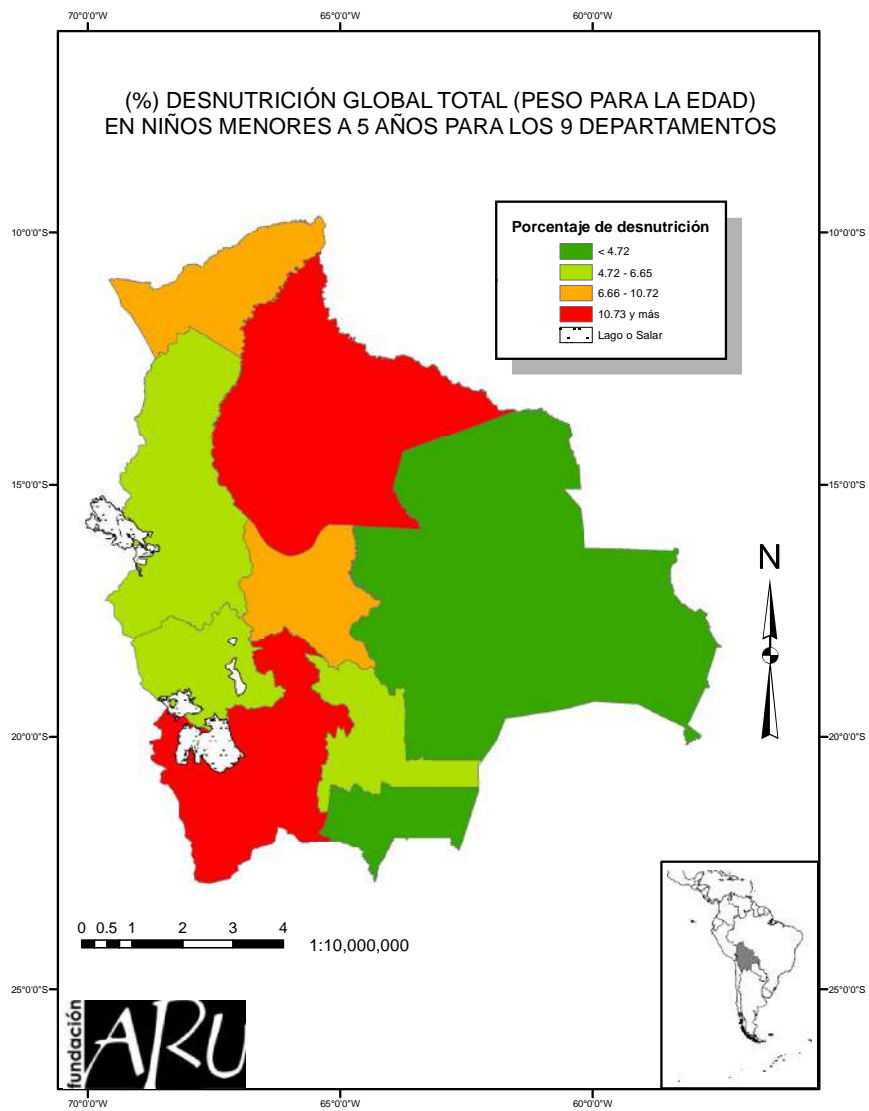


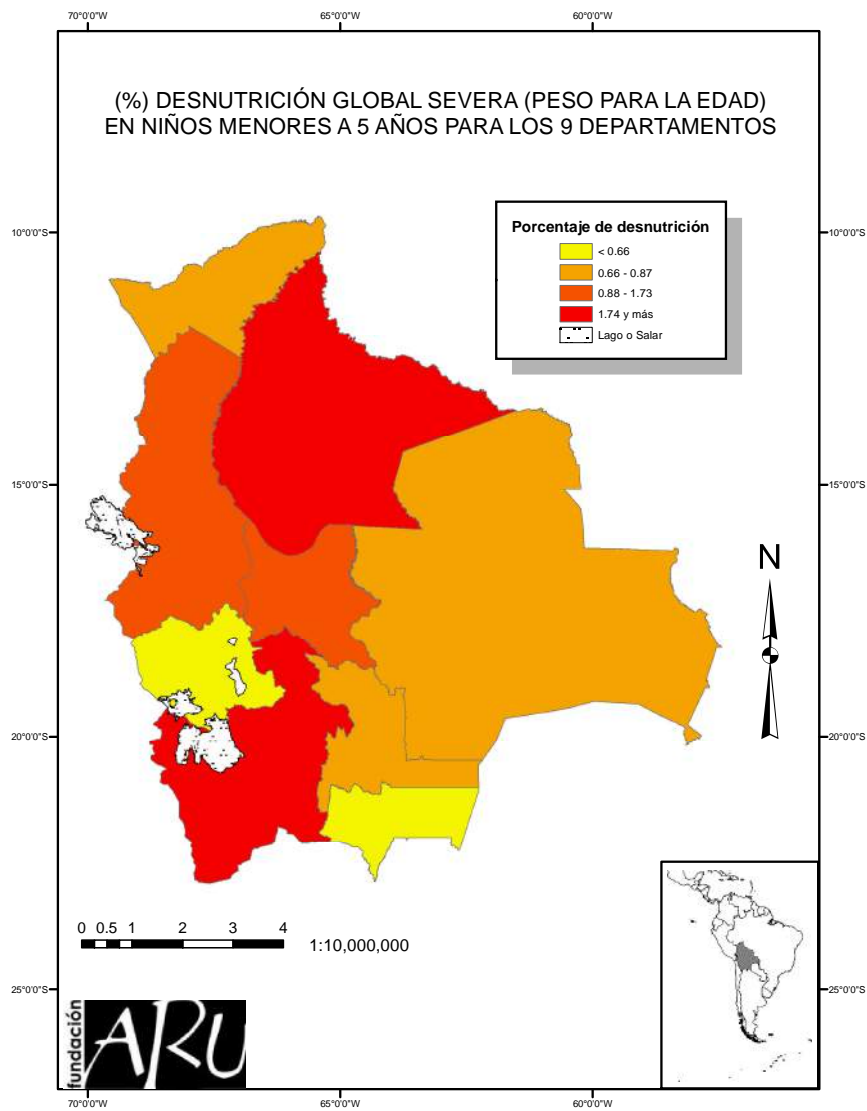


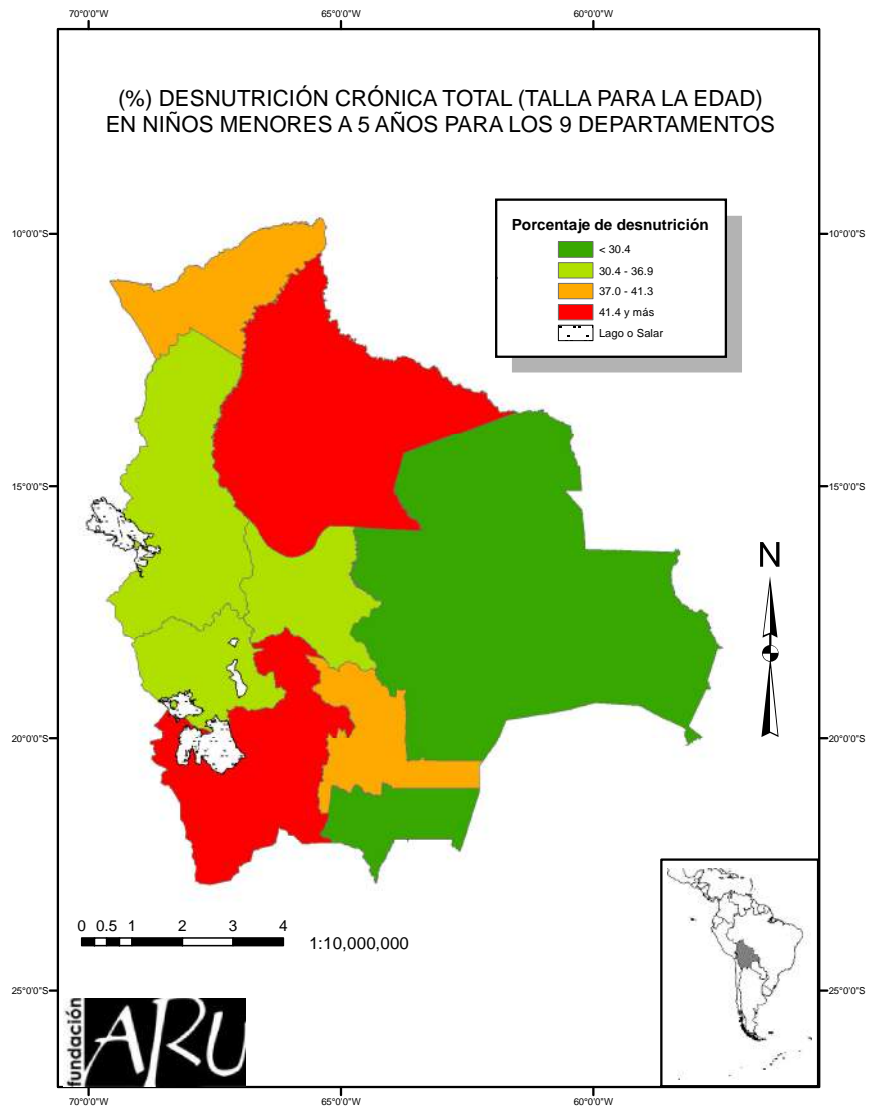
B. Mapas de los indicadores de desnutrición por departamento, provincia y municipio

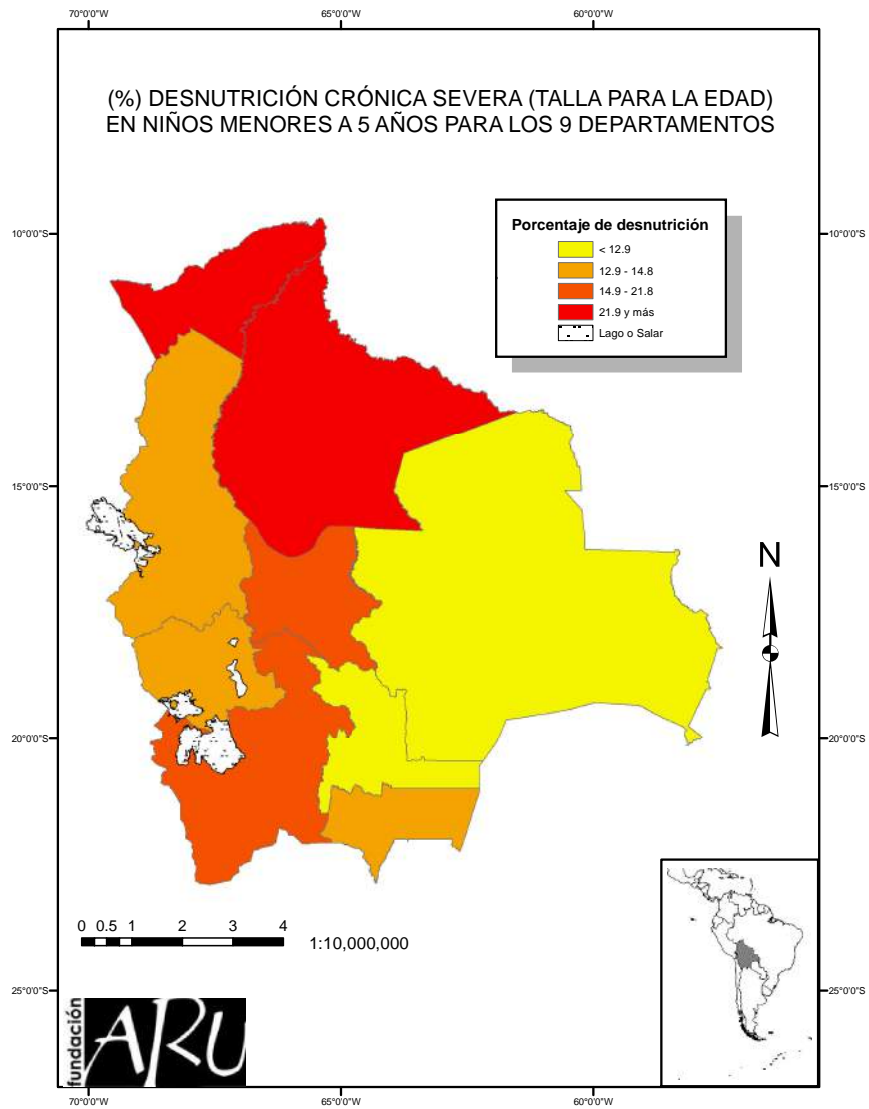


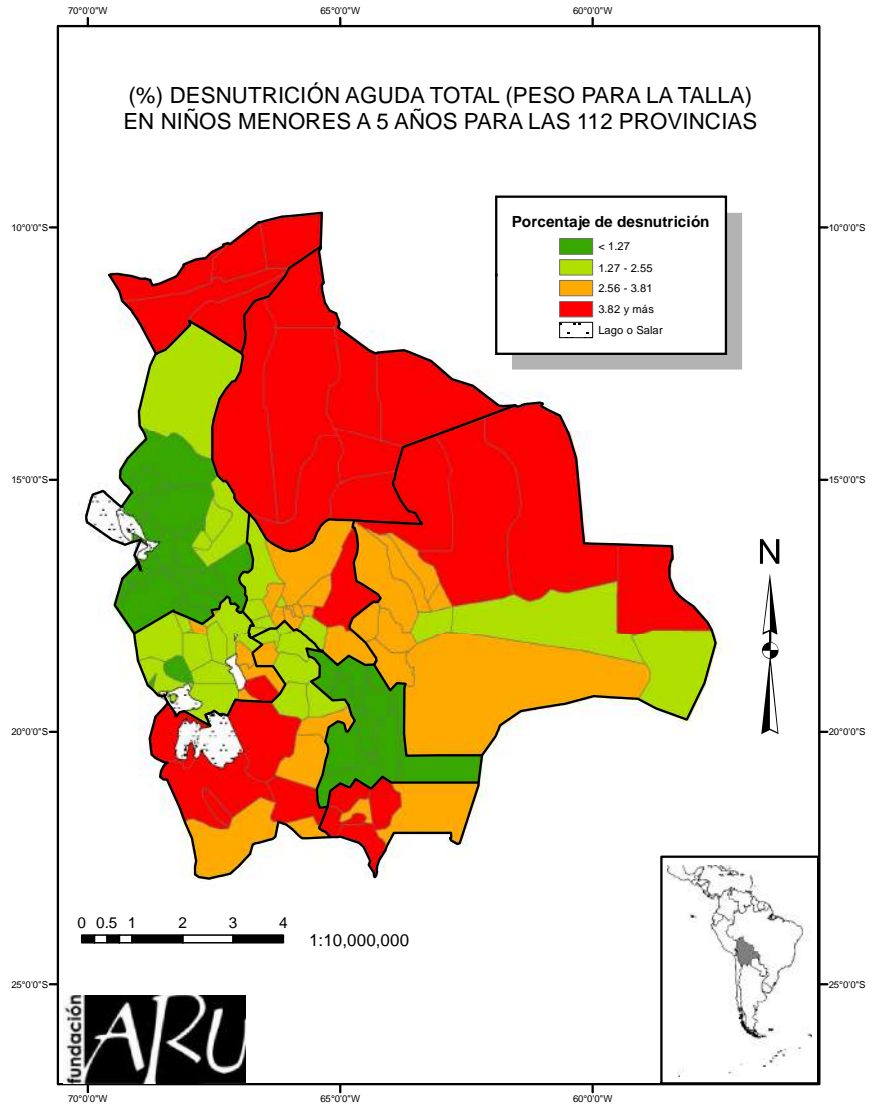


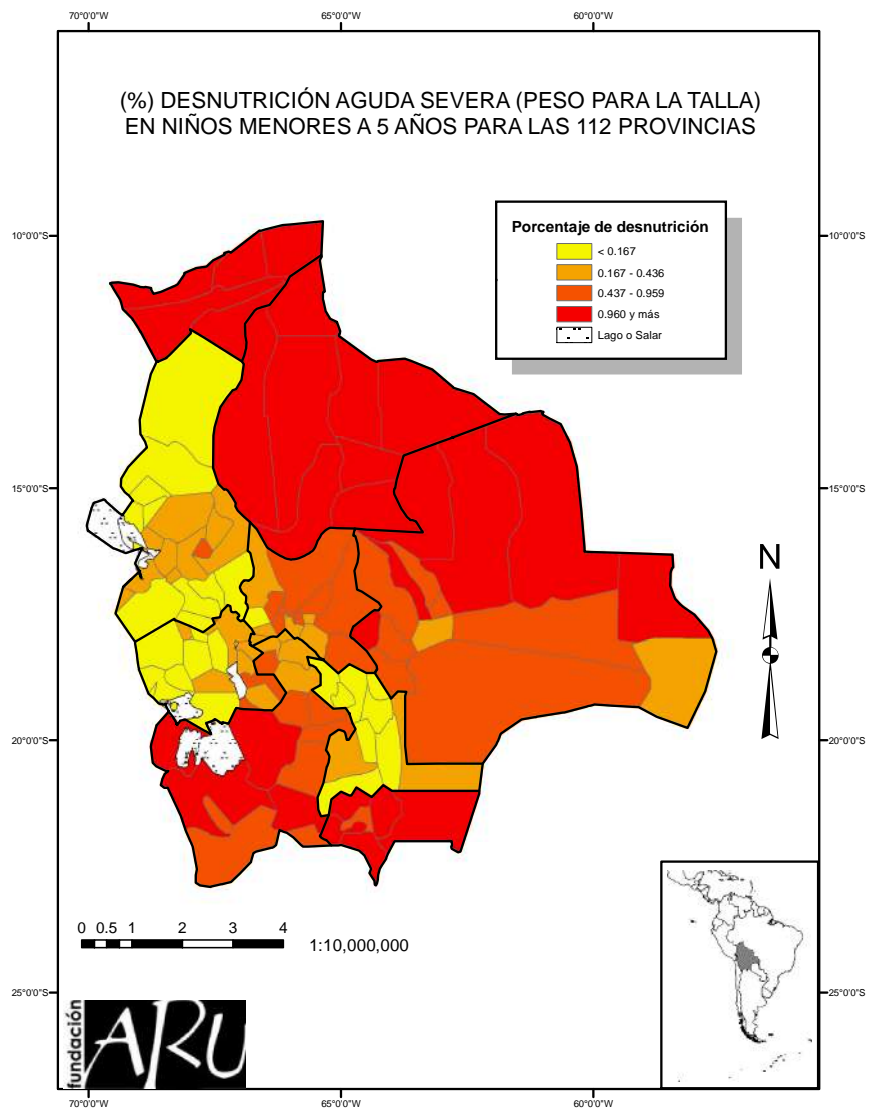




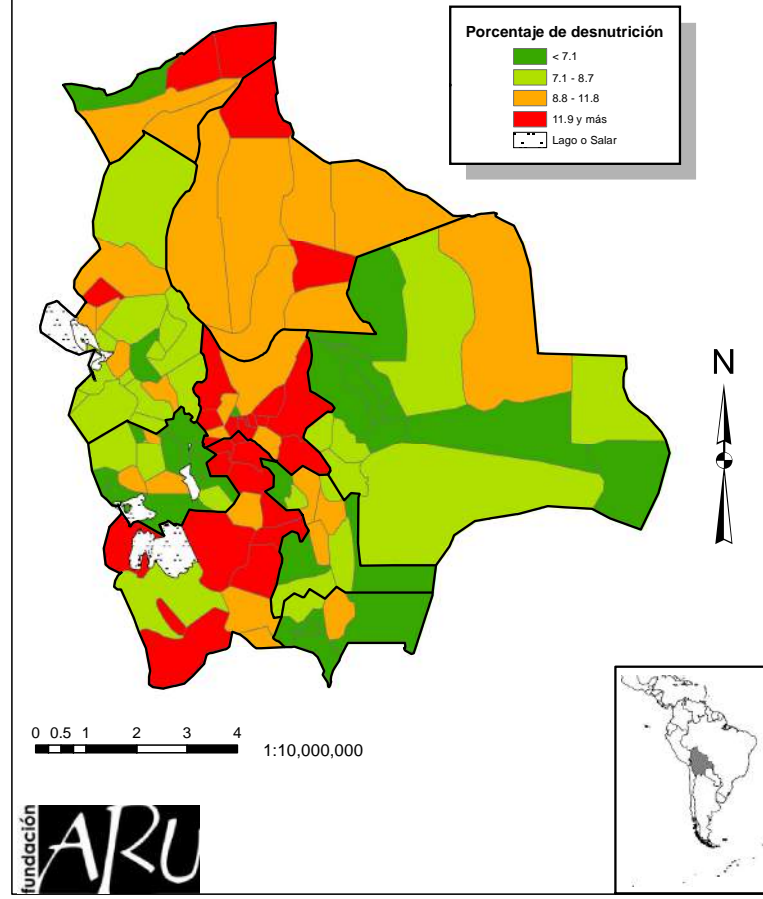


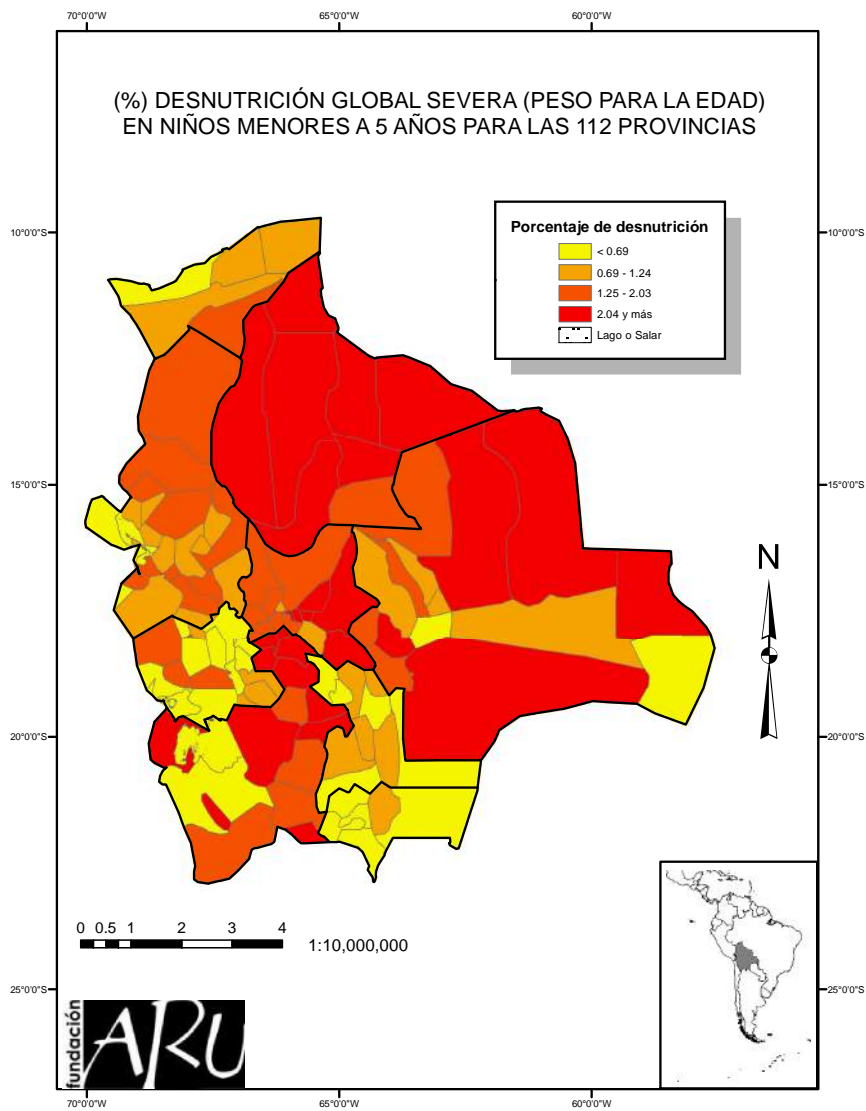


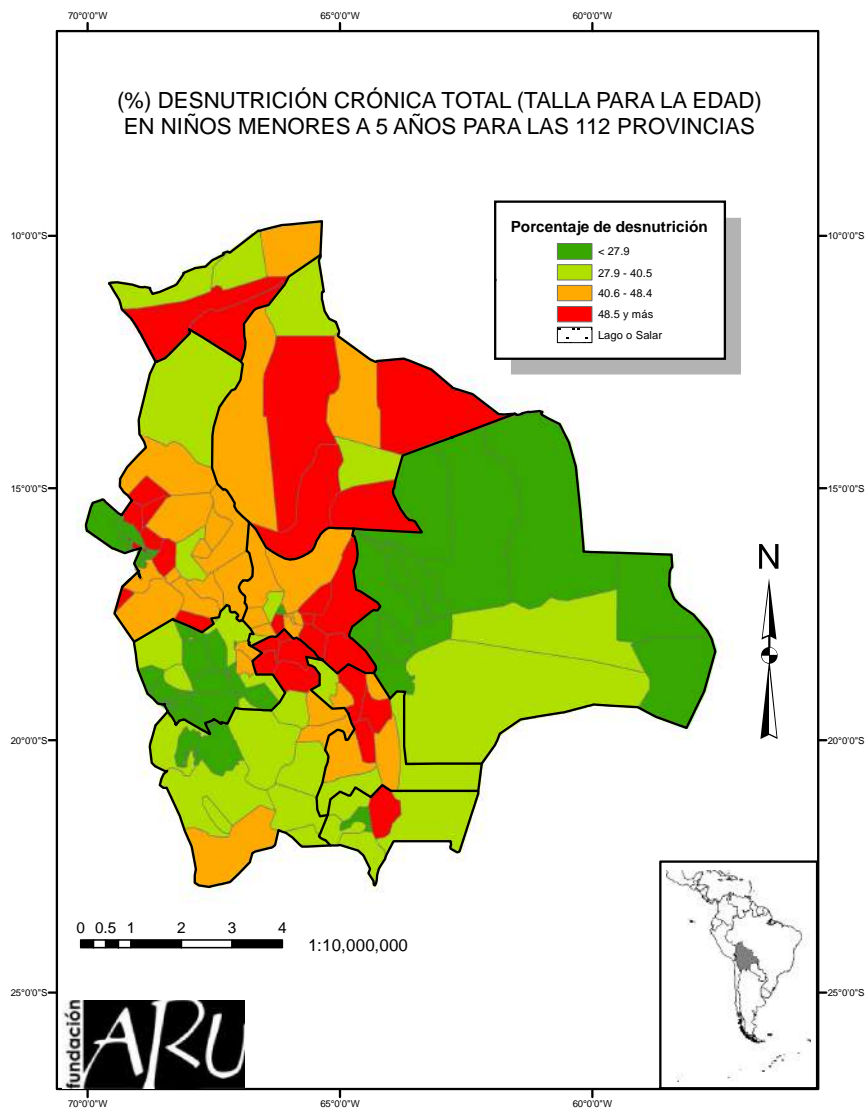


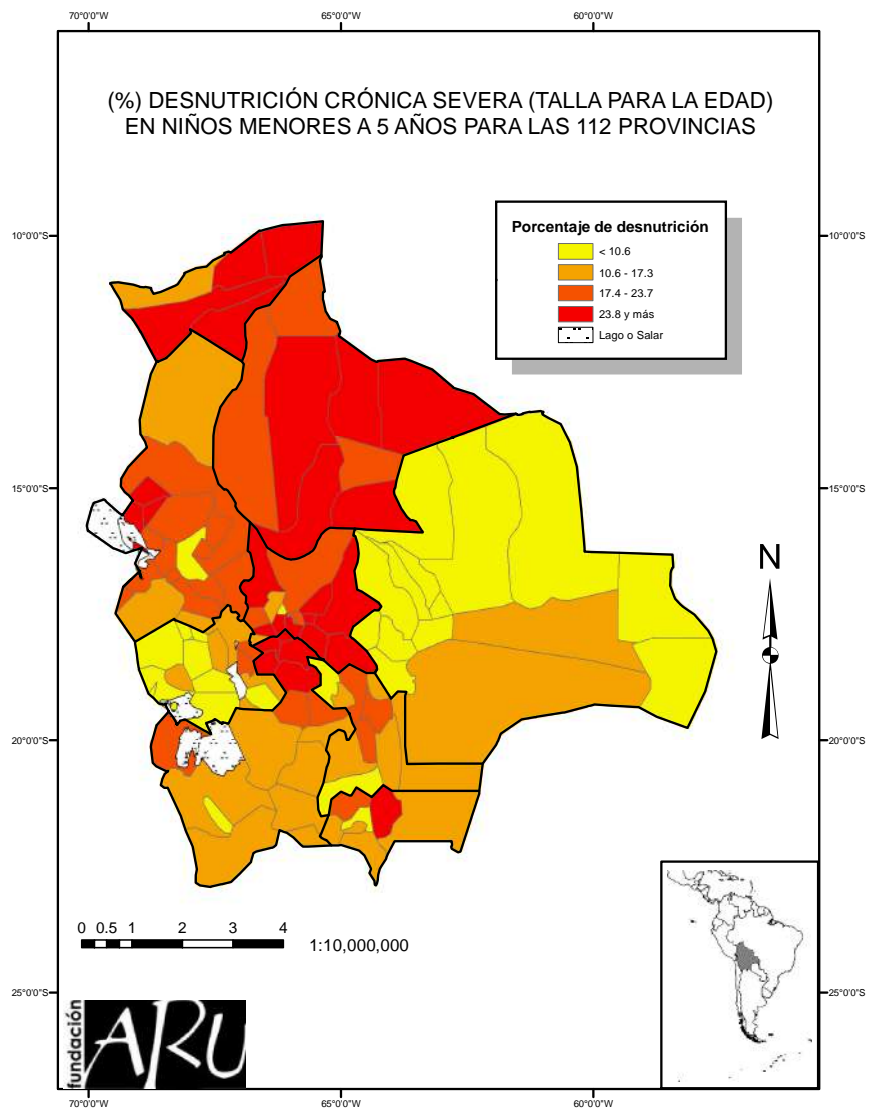


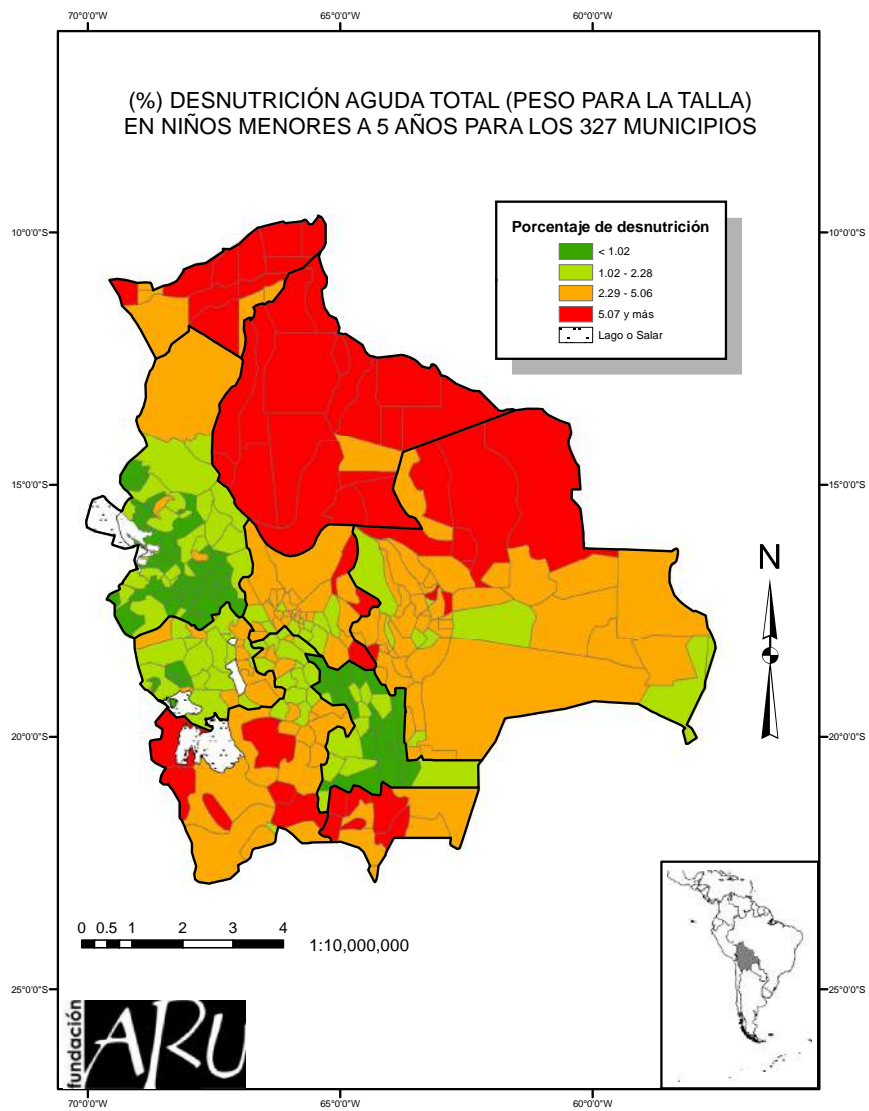
(%) DESNUTRICIÓN GLOBAL TOTAL (PESO PARA LA EDAD)
EN NIÑOS MENORES A 5 AÑOS PARA LAS 112 PROVINCIAS

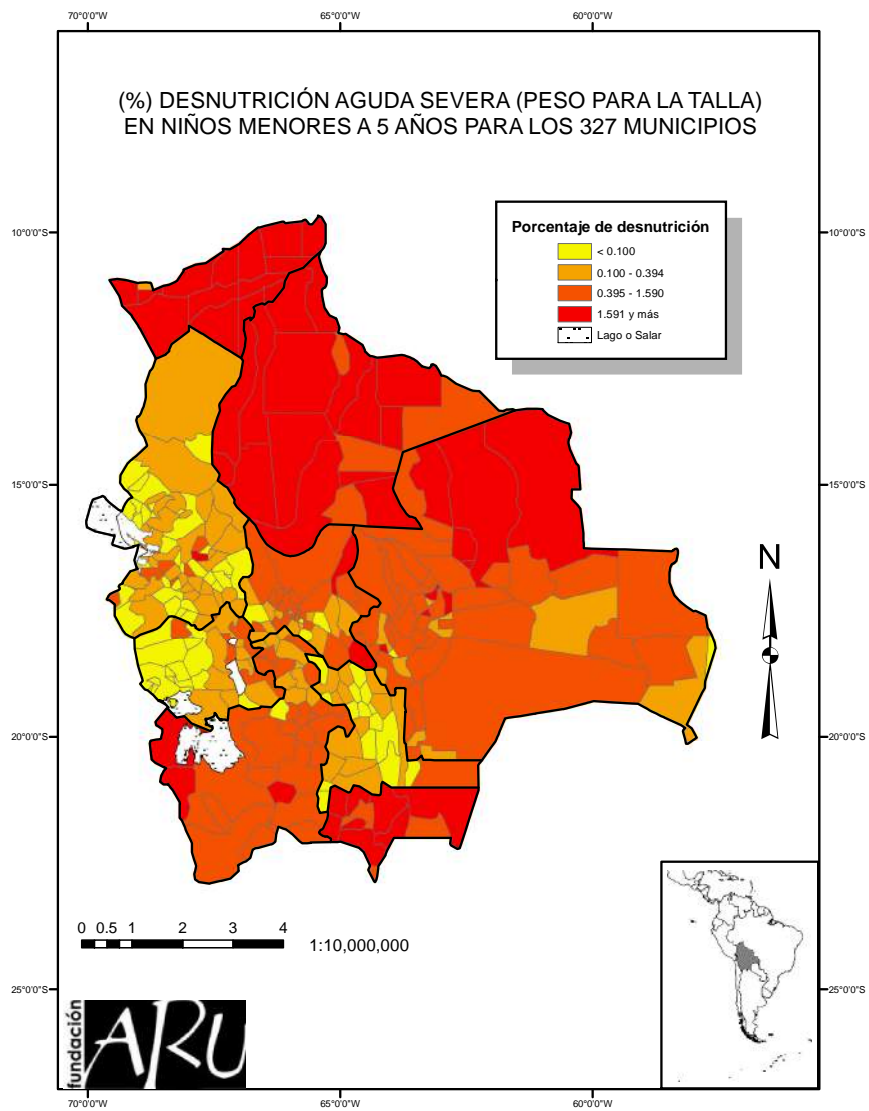


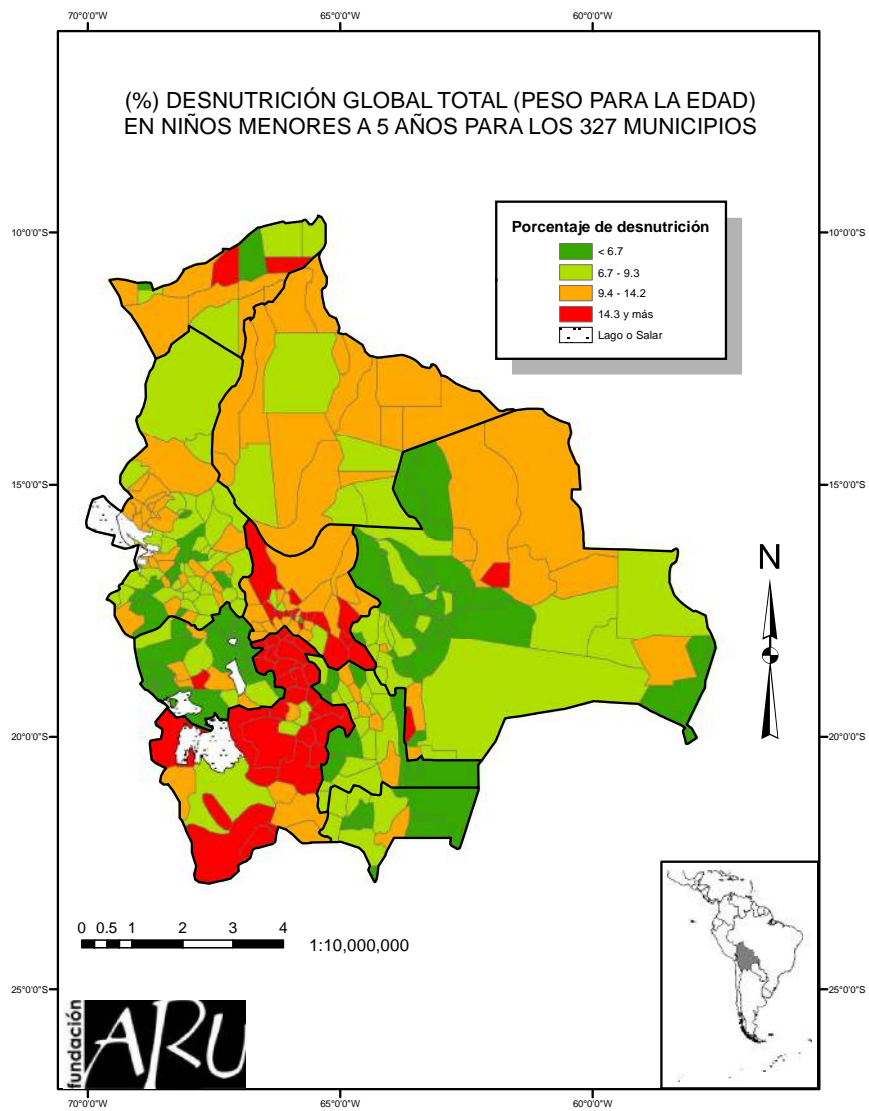


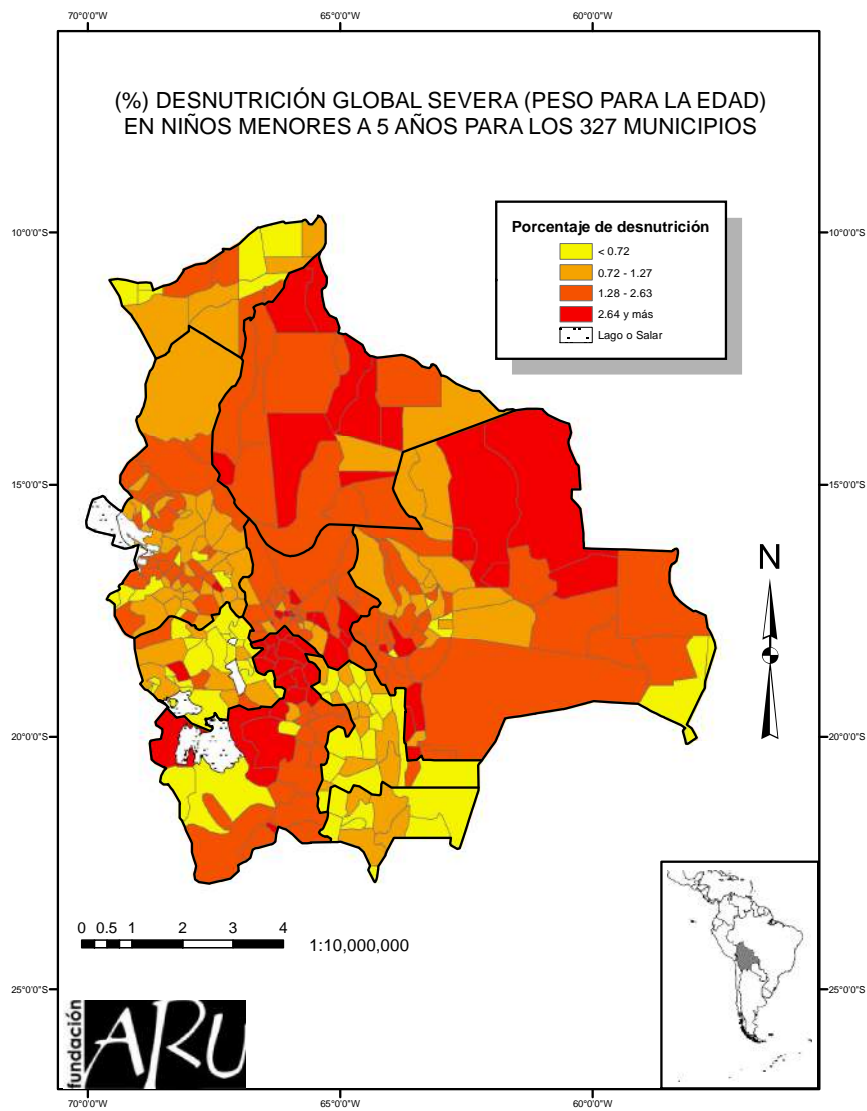


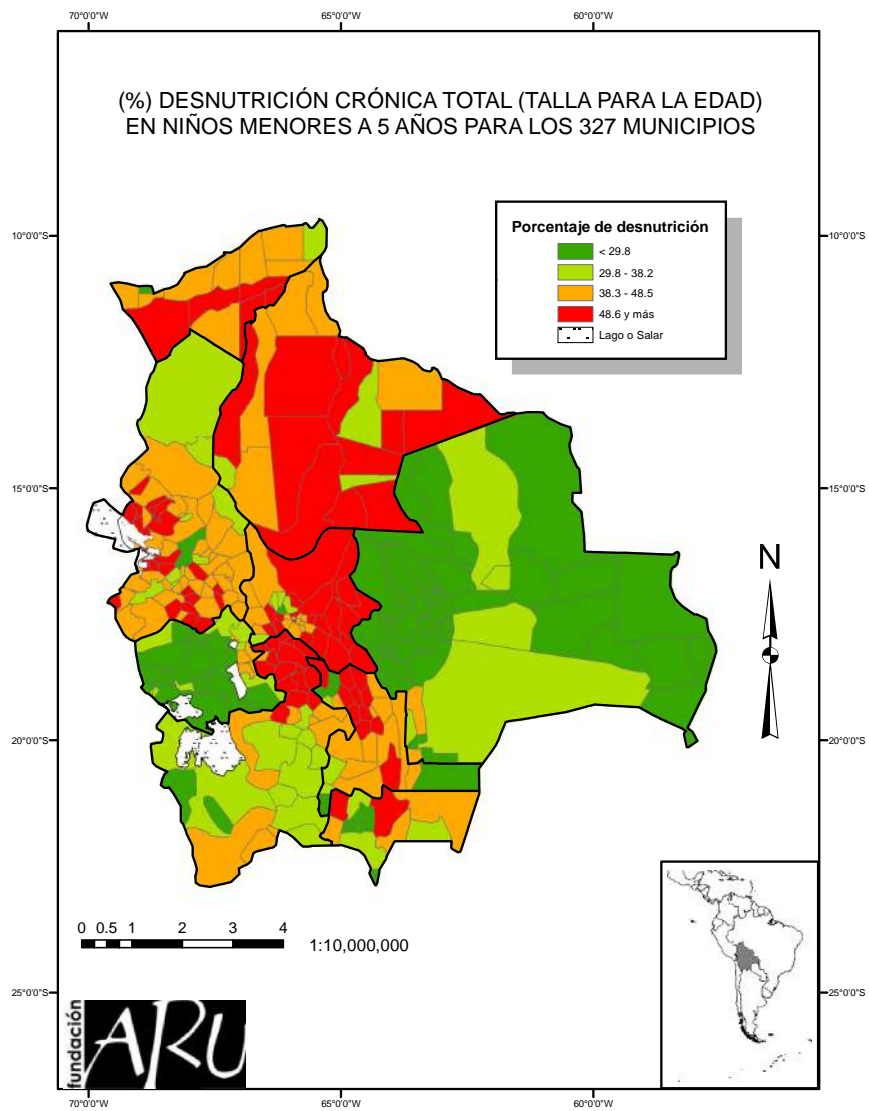


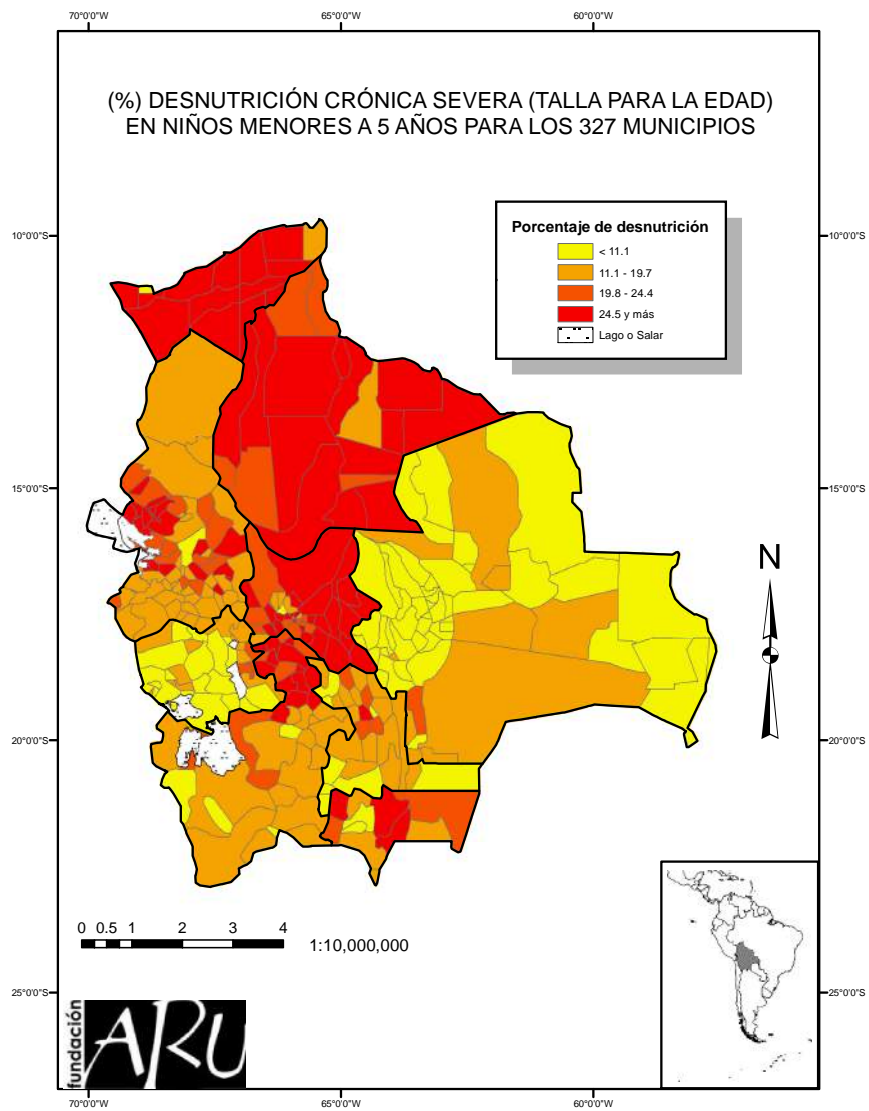












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