

# 북한 경제난의 인구학적 영향과 경제에의 함의\*

문 경 연\*\* · 김 판 석\*\*\*

V.

2000 ,

99

98 2 3 2008

2013

98

\* 2010 ( )

(NRF-2010-413-B00024).

\*\* ( 1 )

\*\*\* ( )

1993 . . . . .

. . . . . 93

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, 93 1 7 20

2013 , 20 27 ,

(impact)

『 : 』 2003

2002 '7.1 1 2

93

95 93

93 93

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10 2003 ,<sup>3</sup> 2003

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<sup>1</sup> 2003 10,340,000 61.8% , 『 』 ( : , 1992); , 『 2010』 ( : , 2010).

<sup>2</sup>

<sup>3</sup> 93 5 98 EU 93 ( : 76.4%, : 73.4%), , 5 93 . EU, UNICEF and WFP, *Nutrition Survey of the Democratic People's Republic of Korea* (November 1998).

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8

.4

(demographic impact)

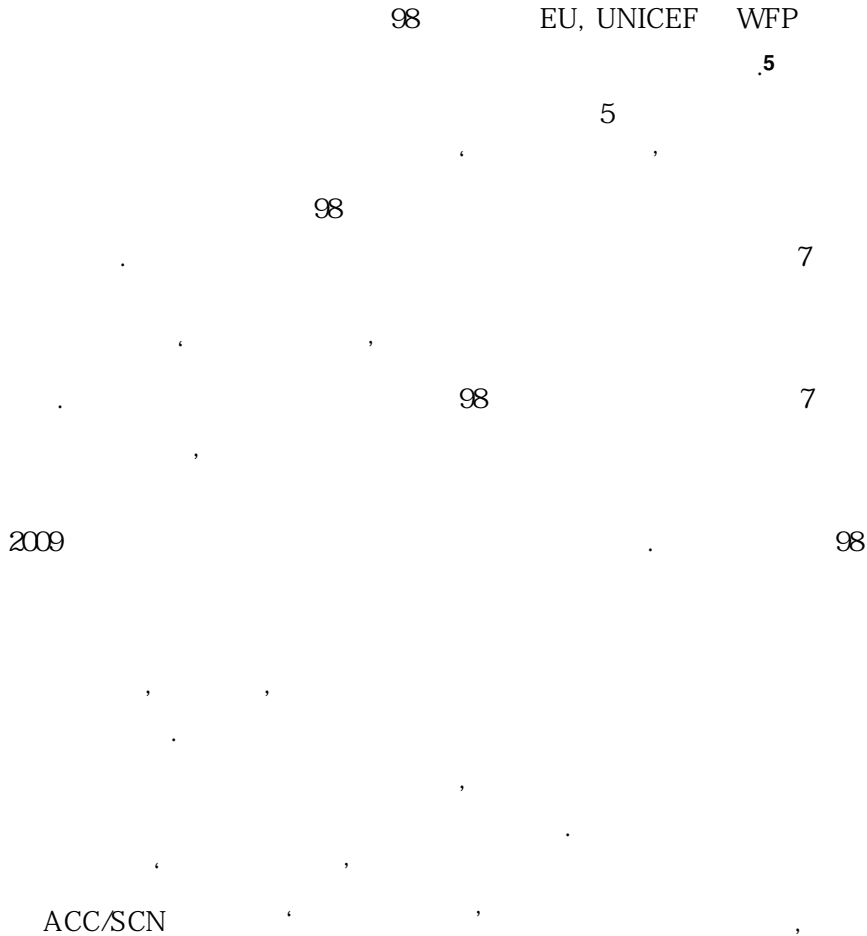
( ) (Administrative Committee on Coordination/Sub-Committee

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2003  
. 2003

on Nutrition: ACC/SCN)  
through the Lifecycle)

(Chronic Undernutrition



<sup>5</sup> . EU, UNICEF and WFP, *Nutrition Survey of the Democratic People's Republic of Korea* (November 1998); DPRK, *Report of the Second Multiple Indicator Cluster Survey 2000* (October 2000); UNICEF, WFP and DPR Korea, *Nutrition Assessment 2002 D.P.R. Korea* (February 2003); DPRK, *DPRK 2004 Nutrition Assessment Report of Survey Results* (February 2005); UNICEF and DPRK, *Analysis of the Situation of Children and Women in the Democratic People's Republic of Korea* (2006); UNICEF and DPRK, *Multiple Indicator Cluster Survey 2009* (2009).

(Daniel Goodkind and West Lorraine),

93 98 2002  
 94 2000  
 58 69  
 63 112 6  
 98  
 95 2000 60 100  
 7 63 112  
 95 98 300 8  
 2000

<sup>6</sup> 『1994 2000 : , 』 ( : , 2004), p. 76

<sup>7</sup> Daniel Goodkind and West Lorraine, "The North Korean Famine and Its Demographic Impacts," *Population and Development Review*, Vol. 27, No. 2 (2001).

<sup>8</sup> 『 : , 1998).

93 2008 , , 93 2008  
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 88 . 9  
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 『2004  
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 2004  
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 98 2004  
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 ‘2012  
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9 , “ ” 『 』, 21 1 (2012), p. 150  
 10 , 『2004 』 ( : , 2005).  
 11 , 『 』 ( : , 2010).  
 12 『 』 (2002); 『 』 (2003); 『 』 (2004); 『 』 (2005); 『2012 』 (2012).

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1955 59

1980 1985

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” 『

』, Vol. 44, No. 2 (2011).

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” 『

』, Vol. 33, No. 1 (2000), pp. 207-240.

2000

2000

EU, UNICEF, WFP 98

(Nutrition Survey of the Democratic People's Republic of Korea)

) 98

2012

2000

.15

2000 , UN

ACC/SCN

<sup>15</sup> Judith E. Brown, et al., *Nutrition through the Life Cycle*, Fourth Edition (Belmont, USA: Wadsworth Cengage Learning, 2011).



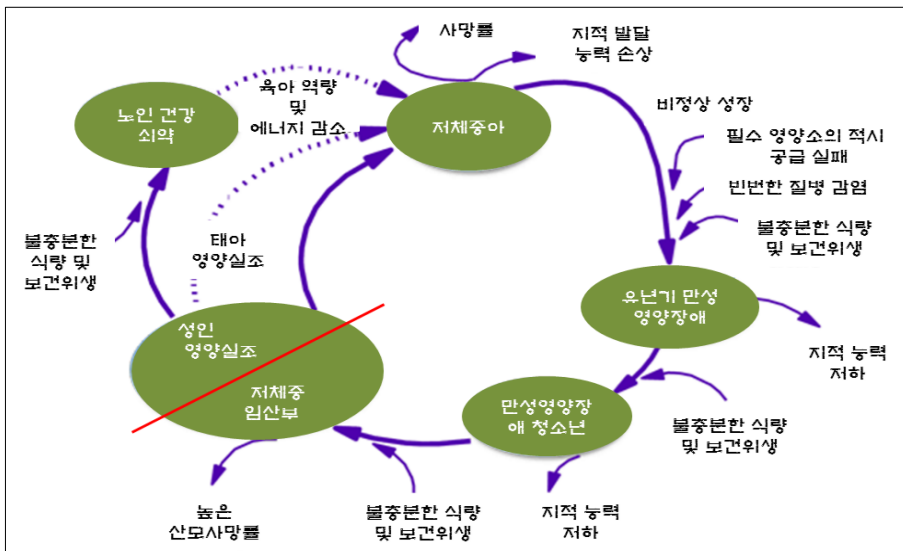
UN ACC/SCN

(catch-up)

'Chronic Undernutrition throughout the Lifecycle (

)'

< 1 >



: ACC/SCN, *Fourth Report on the World Nutrition Situation* (Geneva: ACC/SCN in collaboration with the International Food Policy Research Institute, 2000).

<sup>16</sup> ACC/SCN, *Fourth Report on the World Nutrition Situation* (Geneva: ACC/SCN in collaboration with the International Food Policy Research Institute, 2000).

( )

.17

(impact)

(Intrauterine Growth Retardation: IUGR)

.18

(micronutrient)

A

( )

A,

(high- for- age: stunting)

(underweight)

(care)

(health)

(growth failure)

2 3

, 5

(stunted)

.19

<sup>17</sup> *Ibid.*

<sup>18</sup> Lindsay H. Allen and Stuart R. Gillespie, *What Works? A Review of the Efficacy and Effectiveness of Nutrition Intervention* (ACC/SCN, September 2001); D. J. P. Barker and K. M. Godfrey, "Maternal Nutrition, Fetal Programming and Adult Chronic Disease," in M. J. Gibney, B. M. Margetts, J. M. Kearney and L. Arab, eds., *Public Health Nutrition* (Blackwell Science, 2004).

<sup>19</sup> (stunting)

( )

UNICEF, WFP

98 2 3

1.

93 95

98 EU, UNICEF, WFP

20 212 130

30 6 84 1,887

( : wasting) 15%,

( : stunting) 62.3%, ( : underweight)

60.6% 21

98 ( ,

18%) ,<sup>22</sup> WHO

<sup>20</sup> EU, UNICEF and WFP, *Nutrition Survey of the Democratic People's Republic of Korea*.

<sup>21</sup> *Ibid.*

(very high)

< 1> 5

	%			
	(low)	(medium)	(high)	(very high)
	< 20	20- 29	30- 39	>=40
	< 10	10- 19	20- 29	>=30
	< 5	5- 9	10- 14	>=15

: (World Health Organization: WHO) <www.who.int> ( : 2013.04.20).

2 3

6 84

(recovery) .23

22 ., “ :

23 ., ” p. 212

23 ., “ : J. M. Tanner, “Growth as a Target-seeking Function: Catch-up and Catch-Down Growth in Man,” in F. Falkner and J. M. Tanner eds., *Human Growth: A Comprehensive Treatise*, 2nd ed., vol. 1 (New



< 2 >

( : )

			1) (1,630 )	2			
	1,630	2,080				1,630	2,080
1995/96	598	670	191	54	65 <sup>d</sup>	72	144
1996/97	535	599	248	50	75	123	187
1997/98	461	516	177	90	80	7	62
1998/99	483	541	105	79	25	1	58
1999/00	476	533	134	100	17	17	57
2000/01	478	535	221	123	20	78	135
2001/02	495	554	130	150	10	30( )	29
2002/03	492	551	95	117	10	32( )	27
2003/04	510	571	102	94	10	2( )	59
2004/05	513	574	89	84	10	5( )	56
2005/06 <sup>3</sup>	518	580	64	109	-	45( )	17
2006/07	521	583	73	30	25 <sup>5</sup>	17	79
2007/08	523	586	122	72	23	27	90
2008/09	526	589	95	37	15	43	106
2009/10	512	573	178	29	20	129	190
2010/11	535	599	86	9	31	46	110
2011/12	539	604	73	4	37	32	97

: 1) FAO  
 ; 2) "Quantity Reporting: Food Aid Delivery to North Korea from 1995 to 2011," 『WFP』 ( ), 2012 8 8 ; <http://www.wfp.org/fais/reports/quantities-delivered-two-dimensional-report>  
 \* ; 3) 2005/06 2007/08 ( - )  
 FAO/WFP , FAO/WFP, "Crop and Food Security Assessment Mission to the Democratic People's Republic of Korea" 1995  
 ; 4) 1995/96 2004/05 Stephan Haggard and Marcus Noland, Famine In North Korea (New York: Columbia University Press, 2007), p. 42 ; 5) " 『 ( ) , 2012 8 9 ; <http://db.kita.net>.  
 : , " 『 , 16 2 (2012), p. 302

< 3 >

		(Stunting) <- 2SD					(Wasting) <- 2SD					(Underweight) <- 2SD				
		1998	2000	2002	2004	2009	1998	2000	2002	2004	2009	1998	2000	2002	2004	2009
0	5	-	21.9	17.3	19.4	12.5	-	7.8	5.3	6.0	1.8					5.6
6	11	14.5	31.9	22.7		23.6	17.6	10.4	6.7		4.8				14.1	17.4
12	23	48.4	50.2	41.6	27.1	23.9	30.9	11.9	11.9	8.7	5.7				20.5	16.2
24	35	62.2	47.5	45.6	34.7	32.1	20.5	9.7	8.4	7.3	6.2				27.3	21.7
36	47	75.1	58.6	47.6	46.7	39.5	13.4	10.2	7.4	7.5	5.0				26.3	21.7
48	59	77.5	60.3	47.5	50.8	46.5	8.9	11.9	6.3	6.2	5.2				26.6	21.3
60	84	74.8	-	44.2	46.8		7.8	-	5.6	5.3					22.5	
		62.3	45.2	39.2	37.0	32.4	15.6	10.4	8.1	7.0	5.2	6.6	27.9	21.2	23.4	18.8

: 1998 6 , 2004 0 11 , 60 72

2012  
 (p. 129). : EU, UNICEF and WFP, *Nutrition Survey of the Democratic People's Republic of Korea* (November 1998); DPRK, *Report of the Second Multiple Indicator Cluster Survey 2000* (October 2000); UNICEF, WFP and DPR Korea, *Nutrition Assessment 2002 D.P.R. Korea* (February 2003); DPRK, *DPRK 2004 Nutrition Assessment Report of Survey Results* (February 2005); UNICEF and DPRK, *Analysis of the situation of Children and Women in the Democratic People's Republic of Korea* (2006); UNICEF and DPRK, *Multiple Indicator Cluster Survey 2009* (2009).

95

98 EU, UNICEF, WFP

6 84

98 1 7

2013

15

(recovery)

(catch-up)

2013

2

24

25

1

1

93 14 (1,000 )

2008

19.3

1993

< 4 >

	1993	1994	1998	1999	2001	2002	2003	2006	2008
	14 <sup>1)</sup>	14 <sup>2)</sup> (26.8)	(39)	22.5 <sup>2)</sup>	23 <sup>1)</sup>	21 <sup>1)</sup>	22 <sup>3)</sup>	-	19.3 <sup>4)</sup>
	9.9	-	-	6.2	-	5.3	-	4.1	3.5

: 1) UNFPA, *Country Programme Outline for the DPRK* (2003); 2) *National Report DPRK, The 5<sup>th</sup> Ministerial Consultation for the East Asia and Pacific Region 2001* (2001); 3) WHO, *2005 the World Health Report* (2005); 3) 『2008』(2008); 4) 『(2002. 12)』(http://www.index.go.kr); ( ) (PFB) 『1998』  
: 『2012』 ( : 『2012』 p. 119

1

15 49

<sup>24</sup> 2004 1999 2004 0.19 『2012』  
41.3% 『2012』  
p. 144  
<sup>25</sup> “ ” p. 227.



26

< 5 >

93

< 5 >

(100,000 )

	1993 <sup>1)</sup>	1998 <sup>2)</sup>	2003 <sup>3)</sup>	2008 <sup>3)</sup>	(2000) <sup>4)</sup>	2012 <sup>5)</sup>
	54	105	87	77.2	(90)	85 250

: 1) 『1993년 인구조사』(평양: 중앙인구조사위원회, 1994); 2) UNICEF, *Analysis of the Children and Women in the Democratic People's Republic of Korea* (2006); 3) Central Bureau of Statics in the DPRK, *DPRK 2008 Population Census National Report* (2009); 4) 『2000년 인구조사』(평양: UNICEF, 2000); 5) UNICEF, *Expanded Programme on Immunization (EPI: Expanded Programme on Immunization)* (2012); 6) UNDP, *Overview of Needs and Assistance: the Democratic People's Republic of Korea* (2012).

: 『2012년 인구조사』(평양: 중앙인구조사위원회, 2012), pp. 144, 186, 210

1

27

< 6 >

93 20% 99  
17.80% 2008 14.37%  
15,424 , 131,721 28

26 “ ” :  
 ” p. 227.

27 L. S. Adair, "Nutrition in the Reproductive Years," in F. E. Johnston ed., *Nutritional Anthropology* (New York: Alan R. Liss, 1987), pp. 119-154

28 “ ” p.  
 : “ ” p.

286,146 1993 1998 14,870 , 1998 2008  
271,276 29 .

< 6 > (%)

	1993	1996	1998	1999	2000	2001	2008
	20	201	18.2	17.8	17.5	-	14.37
( )	14,870			271,275			
( )	: 154,424			: 131,721			

: , “ ” pp. 149 150 .

10

5

.30 2008 5 41.8%  
, 18.9%, 15.2%, HIV/AIDS 0.7%

.31

, 2002 2004  
20%

<sup>29</sup> 1993 98 1998 08  
5 10

(impact)

<sup>30</sup> “ ” p. 218

<sup>31</sup> WHO, “WHO- Strategy- DPRK 2009- 2013” (2010).

32  
 (acute respiratory infection, ARI)  
 A 2 , 4  
 12 6 17  
 33 2004 12%  
 84.7% 2009 5.9%  
 5  
 < 7> 5 ( : 1,000 )

	1993	1996	1998	1999	2001	2008	2009
	27	40	50	48	32.2	27.93	-
	-	-	-	-	-	-	5

: , “ ,” p. 151.

, < 7> 93  
 , 98 1,000 50 2008 27.93  
 5  
 2009

<sup>32</sup> DPRK, DPRK 2004 Nutrition Assessment Report of Survey Results (February 2005).

<sup>33</sup> “ ,” (1997).

3 2

34

(goiter)<sup>35</sup> 26%

6 84

1,679 42%

2000 11 16

19% 37

38

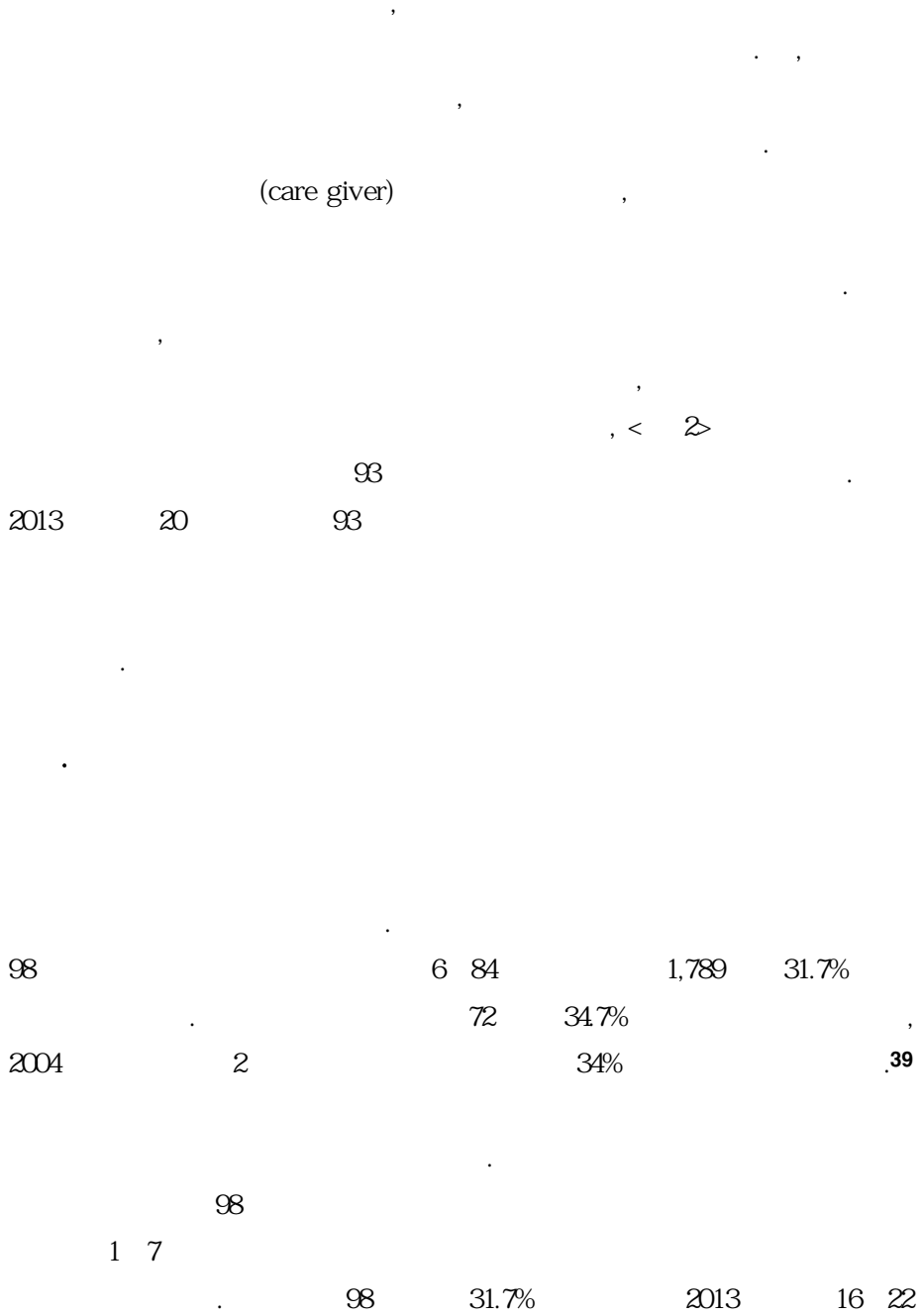
<sup>34</sup> “ :  
,” p. 220

<sup>35</sup> :

<sup>36</sup> EU, UNICEF and WFP, *Nutrition Survey of the Democratic People’s Republic of Korea* (November 1998).

<sup>37</sup> DPRK, *Report of the Second Multiple Indicator Cluster Survey 2000* (October 2000).

<sup>38</sup> “ :  
,” pp. 221 223



<sup>39</sup> EU, UNICEF and WFP, *Nutrition Survey of the Democratic People's Republic of Korea* (November 1998).

2000

12cm .40 EU Z- score

1997

2

‘ (catch- up)’

98 2013

98 6 84

12cm

41 , 2003 248

42

98 6 84

40 “ : ” pp. 215 217.

41 『 』, 2003 7 11 .

42 A. R. Frisancho, *Human Adaptation and Accommodation* (Ann Arbor: Michigan University Press, 1993), pp. 357 397. “ ” 『KDI 』, 148 (1999.9.20).

( , ) ( , , )

43

### V.

99

1995 97

97

1,600kcal

13%

30%

44

14

93

2013

99

(food)

(care)

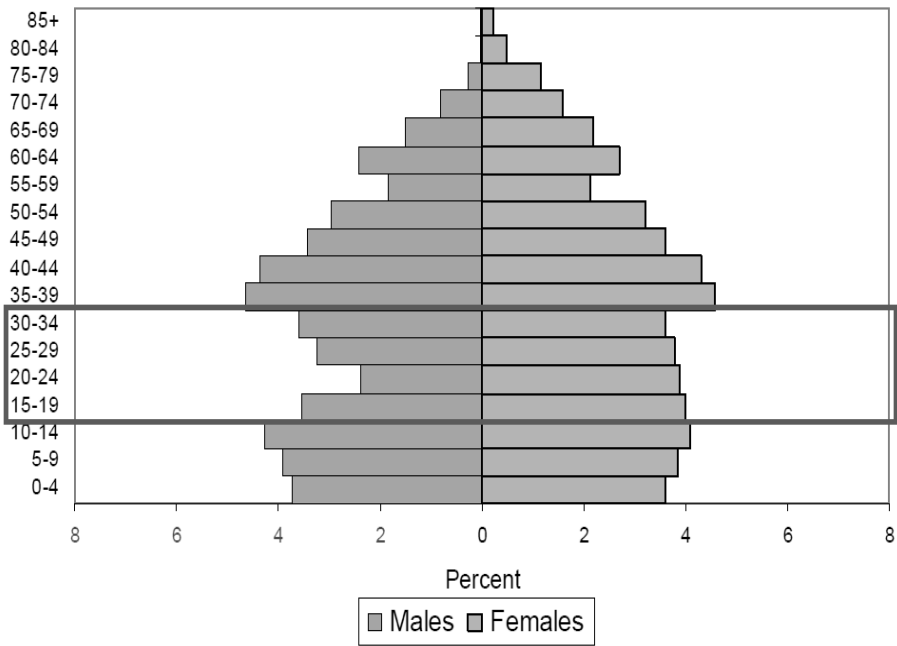
(health)

43

44

“ , ” pp. 11-12  
 , p. 12

< 2009



: UNICEF and DPRK, *Multiple Indicator Cluster Survey 2009 (2009)*, p. 25

, < 2009

2009

15

34

93 1 18

.45

45

28



1990 21%, 1996 30%, 2001 34% 2012 35%

.46 , 35%

93

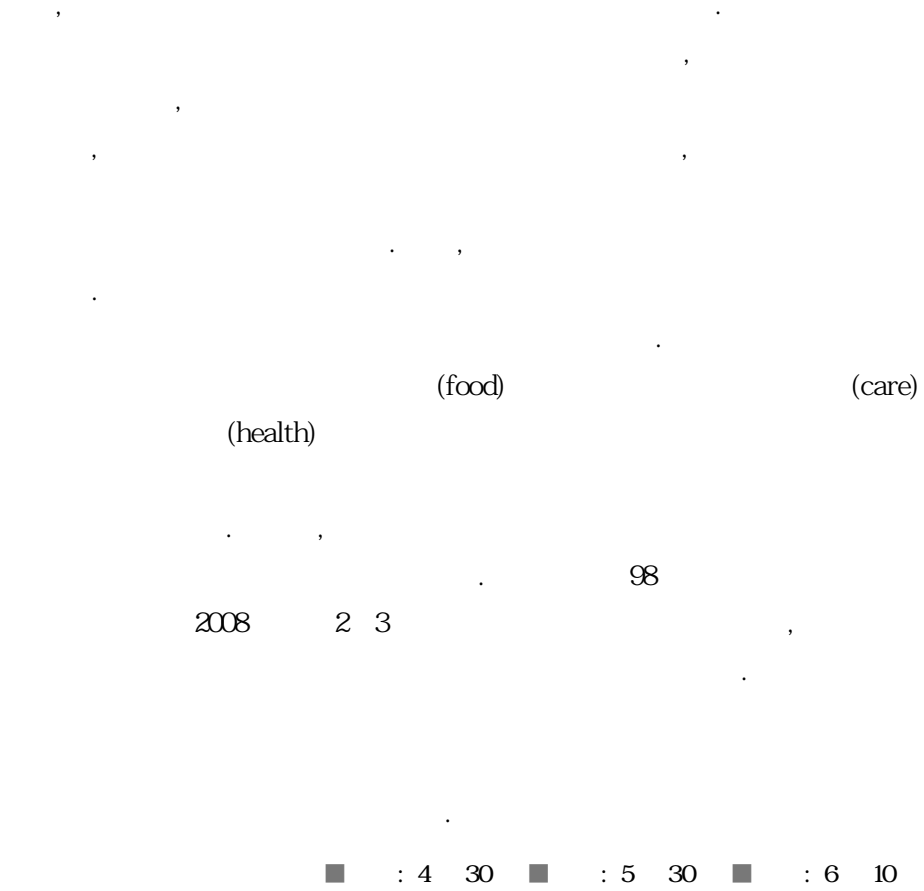
2000

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98 2 3 2008

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<sup>46</sup> International Food Policy Research Institute, 2012 Global Hunger Index <<http://www.ifpri.org/book-8018/node/8058>> ( : 2013.04.20).



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『2012』, 2012

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International Food Policy Research Institute. 2012 Global Hunger Index <<http://www.ifpri.org/book-8018/node/8058>> ( : 2013.04.20).

Abstract

## The Demographic Impact of the North Korean Economic Crisis and Its Implications for the North Korean Economy

*Kyung-Yon Moon and Pan-Suk Kim*

In 2000, Park Sunyoung's study, which was on the same topic and objectives as this study, tried to examine the demographic impact of the North Korean economic crisis, but it was not enough to show the impact of the economic crisis due to the lack of data on the North Korea economic crisis in 2000. Cho Dongho and Jang Namsoo also attempted to examine the relationship between demographic changes in North Korea and labour productivity and economic growth. Neither did this study show the impact of chronic economic downturn on the demographic changes in North Korea which has continued for the last 20 years from 1993 to 2013.

This study, therefore, seeks to identify the demographic impact - not simply mortality rate, but also the impact of malnutrition throughout the life cycle of North Korea people - during the North Korean economic crisis from 1993 to 2013. By doing so, this study extrapolates a more detailed and comprehensive demographic impact of the economic crisis in North Korea in 2013. This article found that the North Korean economic crisis, which continued since 1993 until 2013, resulted in the significant demographic impact and changes in the North Korean population. This study also argues that such demographic changes should not be ignored by the North Korean government in the process of economic resuscitation.

Based on the findings, this study suggests the resumption of humanitarian food assistance to North Korea, especially for vulnerable target groups such as infants, children, adolescents, mothers, and women in fertile regardless of the political, military and economic confrontation between North Korea and South Korea. Humanitarian assistance should also include health sector assistance as well as food aid to North Korea. Lastly, this study suggests the continuation of nutritional surveys of UN agencies in North Korea and for this, at least, South Korean government needs to finance the budget for UN nutritional surveys in North Korea in order to understand the demographic impact of the North Korean economic crisis more scientifically and design a future possible response strategy for the recovery of North Korean people from the humanitarian crisis.

**Key Words:** North Korean economic crisis, demographic impact, the impact of malnutrition throughout the lifecycle, nutritional situation, North Korean economy.

