# **Original Article**

# An Evaluation of Four Years Implementation of National Nutrition and Food Security Policy in Iran: Lessons Learned

#### **Abstract**

Background and Aims: National Nutrition and Food Security Policy of Iran was developed and ordered by Office of Community Nutrition Improvement, in cooperation with National Nutrition and Food Technology Research Institute and National Institute of Health Research in 2012. This study was aimed at evaluating the success of the operationalization of the Policy between 2012 and 2015 and using the lessons learned in future policies. Methods: The participatory evaluation was conducted by taking part of all main partners including trustee organizations involved in implementation of the document, specialists and academic researchers, people's deputies, health service, headquarters experts at Ministry of Health. Three qualitative methods including reviewing evidences, interviews, and focus group discussions have been used to gather information. The degree of achievement of the document's strategic objectives, as well as the degree of adaptation of the document implementation to the desired state, has been determined. Findings: The mean percentage of progress in achieving outcomes and adaptation of the deployment method to ideal criteria (for 2016) of the National Document on Food and Nutrition Security from 2013 to 2017 are 52.6% and 41%, respectively. The best success was found in the existence of an evidence-based program (70%), a coalition of policy implementation (66.1%), and indicators for monitoring the progress of the document (61.1%). The least success was related to the weakness of public justification and public participation (20%) and lack of ranking and encouraging partners' function (24%). Lack of approval of the national document at the High Council for Health and Food Security of the country (HCHFS) was the important factor which led to less progress of the document. Conclusion: It is recommended to target avoiding structural changes while saving time, strengthening intersectoral capacity for collaboration, encouraging partners, and empowering the environment of the provinces in the coming years.

**Keywords:** Implementation, deployment, Iran, nutrition and food security, policy, program evaluation

## Introduction

Nutrition transition is the shift in dietary consumption and energy expenditure that coincides with economic, demographic, and epidemiological changes. Nutrition transition in many countries has led to an increase in excess dietary intake and related chronic diseases despite continued under-nutrition and nutrient inadequacies.[1] Dealing with this double edge problem poses a major challenge to governments, as well as health institutions globally.[1-3] Therefore, many countries in the world have developed food and nutrition policies including Rwanda<sup>[4]</sup> and Malawi<sup>[5,6]</sup> in Africa, India<sup>[7]</sup> and Bangladesh<sup>[8]</sup> in Asia, Norway,[9] Finland,[10] and Sweden[11] in Europe, Brazil<sup>[12]</sup> in South America, and Western Pacific Region[13]; however, a few of them have evaluated the progress of

stakeholder engagement.

In Iran, developing the National Nutrition and Food Security Policy (NNFSP) was ordered by Community Nutrition Office, Iranian Ministry of Health and conducted with cooperation of National Nutrition and Food Technology Research Institute and National Institute of Health Research in 2012. The design and finalization of this document was carried out by attending

these documents.<sup>[8,9,14-16]</sup> A review conducted

by Phulkerd et al.[17] showed that the most

frequently identified barriers and facilitators

for policy implementation to create healthy

food environments for preventing obesity

and diet-related non-communicable diseases

were infrastructure support, resources, and

all stakeholders, including representatives from Ministry of Jihad-e-Agriculture, the Ministry of Mining Industry, the Ministry of Labor and Social Welfare, the National

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Standard Organization of Iran, the Chamber of Commerce, the Supreme Council of the Provinces, and Islamic Republic of Iran Broadcaster. This document is communicated by Minister of Health and Medical Education [and as the secretary of the High Council for Health and Food Security of the country (HCHFS)] to the heads of the universities of Medical Sciences and affiliated ministries as well as peer organizations.<sup>[18,19]</sup>

At least one study by Goshtaei<sup>[20]</sup> was conducted to evaluate and analyze the nutrition policy process challenges in Iran. It was concluded that the nutrition policies sometimes have not been able to respond to the nutritional problems. One of the important reasons is that nutrition is not a priority for policy makers. Many policies suffer from a lack of adequate and appropriate resource allocation. Cooperation mechanisms to resolve nutritional problems are sometimes ineffective and inefficient.

Two other studies have been evaluated the performance of the Provincial Health and Food Security Workgroups (PHFSWs) as an authority for policy making, planning, and coordinating the intersectoral health interventions at local levels. Yazdi-Feyzabadi et al.[21] examined the viewpoints of experts working in the deputies of health at the universities who had experiences with the PHFSWs using a self-reported questionnaire. They found that the frequency and discipline of the meetings, participation, and involvement of members, management of the meetings, communication of workgroups, and addressing to the health equity and social determinants of health approach in decision making in about half of the universities were not appropriate. Another study by Damari et al.[22] evaluated first 3 years' performance of the PHFSCs, by content analysis of "the approved tasks" and also "the essential aspects for promoting of PHFSCs" by focus group discussions. Findings showed that the meeting's agendas of the PHFSCs have less followed the prioritized major health issues of provinces and national burden of diseases. PHFSCs secretaries believed that the main obstacles of the PHFSCs' successes are weak financial resources, and lack of decisions executive enforcements.

The present study was aimed at evaluating the success of four-year implementation of the National Nutrition and Food Security Document between 2012 and 2015 in achieving their goals. This evaluation was approved by the Food and Nutrition Security Working Committee secretariat of the High Council in August, 2016 to provide evidence for reform<sup>[23]</sup> and update the contents of the document for approval at the forthcoming meeting of the HCHFS of the country.

## **Methods**

This study was a participatory evaluation research which involved the stakeholders in its three phases: describing the program and developing evaluation indicators, collecting data, and analyzing and making judgments. Data were collected from interviews with key informants, analyzing of policy documents and related reports, and focus group discussion [Table 1]. Stakeholder analysis was done with commitment and impact matrix model<sup>[24]</sup> and stakeholders were divided into five groups:

- Trustee organizations involved in implementation of the NNFSP document (working with each other at specialized workgroup on nutrition and food security): Ministry of Industry, Mine and Trade (MIMT), Ministry of Agriculture (MOA), Institute of Standards and Industrial Research of Iran (ISIRI), Food and Drug Administration (FDA), Iranian High Council of Health and Food Security, Ministry of Cooperatives, Labor, and Social Welfare
- Specialists and academic researchers aware of the document content (already formed as the supervisory board) including professors in field of nutrition and diet therapy, food industry engineering, nutritional epidemiology, and social medicine
- People's deputies: representatives of the high council of provinces (Islamic Councils of the City and Village) previously joined to the specialized workgroup of Nutrition and Food security
- 4. Health service providers at universities of medical sciences and provinces
- 5. Headquarters experts at Ministry of Health.

For collecting data on performance related to outcome targets, at first, relevant trustee organizations were recognized, and then, invited to attend in three focus group discussion through the official correspondence from the secretariat of the high council of health and food security, Tehran. Based on the predefined framework, organizations reported their performance and submitted the related documents. Participants had opportunities to ask them to clarify their performance.

All relevant organizational performance for each target were summarized and prepared in the form of a score questionnaire. Members of the specialized workgroup of nutrition and food security were selected as the judiciary committee. The process of scoring was explained to all participants:

After adequate negotiations between members, they were required to input their scores between 0 and 100 on the base of success in achieving targets:

Table 1: Methods of data collection

Document analysis Interview analysis

Trustee organizations
Specialists and academic researchers
People's Representatives
Service providers
Headquarters experts

Focus group discussion

- 1. How much documentation (licenses, operational plans, agreements, etc.) have been done and produced to facilitate interventions related to each targets?
- 2. How much have environmental and headquarters staff been informed about the document and its targets or received training?
- 3. How much service has been provided at the most environmental levels?

At the same time, instead of interviewing stakeholders, a questionnaire was developed by group discussion containing following questions:

- What have your organizational functions been in related to targets of the national document during the implementation phase (2012–2016)?
- In your opinion, what are the main achievements of this document?
- In your opinion, what factors have led to no further achievements?

The scores assigned by the participants were summarized and presented as the mean for each target.

In order to evaluate establishment of the national document, a tool produced by reviewing relevant document and also experts' opinions was used. After introducing the objectives and methods for expert members of the supervisory board, the functions related to each criterion were presented and scored from 0 to 100 by experts.

## Results

The findings of the research are presented in the two following sections: reporting program progress, challenges and the way forward.

## Reporting program progress

Outcome targets of the National Document on Food and Nutrition Security for 2016 are shown in Table 2. The other strategic objectives set for 2021 have not been addressed here. Based on the functions related to strategic objectives and stakeholder judgment of the degree to which the interventions were implemented, the average percentage of achieving the national document goals was 55.3% [Figure 1]. The greatest progress in achieving goals was belonged to strategic objectives number six and nine (73% and 77% respectively), while the third strategic objective (access and consumption of whole grains) has not made much progress (21%).

The mean percentage of adaptation of deployment method to ideal criteria was 41%. Based on experts' opinion, the best adaptation belonged to designing an evidence-based program with stakeholder participation (70%), forming a coalition for policy implementation (66.1%), and using baseline markers for monitoring program progress (61.1%). On the other hand, publicizing and celebrating short-term success and also rankings and encouraging performance of

## Table 2: Strategic objectives of the National Document on Food and Nutrition Security for 2016

## Outcome targets

- 1. Increasing nutritional literacy of target groups, by  $\geq 50\%$  compared with base year
- 2. Increasing average amounts of fruit, vegetables, milk and dairy produce, and pulses by 15% compared with base year
- 3. Increasing access to whole grains and their consumption by 20% compared with base year
- 4. Decreasing the amounts of salt, sugar and fats in foods and beverages by ≥30% compared with base year
- 5. Decreasing at least 30% of the main risk factors of agriculture products, by approval of the High Council of Health and Nutrition Security
- 6. Notifying prioritized standards of the food chain to all responsible for its control, based on risk assessment, in at least 50% of implementing centers, with determination of the priorities by the High Council of Health and Nutrition Security
- 7. Public announcement of the rank of major food producers, according to the policies of safety and nutritional value
- 8. Establishing at least 1 nutrition consultation visit for obese children, adolescents, adults, pregnant women and elderly people, in family physician programs, and follow up visits for 50% of them
- 9. Maintaining and improving the coverage of iodized and refined salt consumption in ≥99% of households
- 10. Establishing a system of food and nutrition management in the provincial crisis management systems (designing, justifying, educating and implementing maneuvers)
- 11. Full establishment of nutritional labeling for all processed food products, proportionate to the level of people's nutritional knowledge
- 12. Controlling the required hospital food solutions and supplements, based on current standards
- 13. Implementing ≥30% of the approved standards of the Ministry of Health and Medical Education on nutrition consultation services at hospitals
- 14. Standardizing food units of hospitals by end of 2014
- 15. Notifying and promoting regulation and policies for improving nutrition in public places, with priority for restaurants, kindergartens and schools, and at least 1 monitoring session and presenting feedback
- 16. Establishing food and nutrition security surveillance system, and publishing annual reports on it (for some indicators, bi- or tri-annual reports should be published)
- 17. Establishing of programs for food fortification and supplementation of iron, zinc and vitamins A and D; both in the food industry and for primary prevention

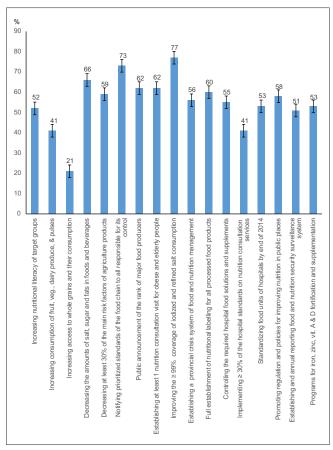


Figure 1: The percentage of progress in achieving outcome targets (for 2016) of the National Document on Food and Nutrition Security from 2013 to 2017

partners (20% and 24%, respectively) were poorly adapted [Figure 2].

## Challenges and the way forward

Results of the qualitative analysis showed that there are at least five focal points in terms of deployment of the NNFSP document including improving quality of holding meetings (the specialized nutrition and food security workgroup), generating evidence and monitoring of national document indicators, approval of the national document at the specialized nutrition and food security workgroup, empowering partners (in provinces) environmentally, justifying public opinion and encouraging public participation in implementing the national document.

In the case of the national document content, focusing on four points, in addition to the current content, is noticeable: improving the quality of bread as the staple food in Iran, implementing patterns for reducing food insecurity in low-income provinces, improving the quality of nutrition counseling services for public, policy advocacy for improving economic, social, technological, international and environmental factors affecting the sustainable production of food.

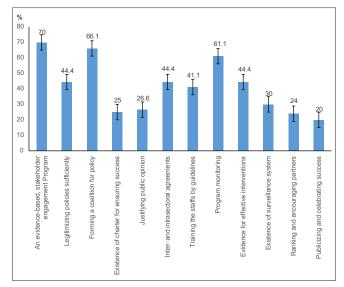


Figure 2: Mean percentage of adaptation of deployment method to ideal criteria of the National Document on Food and Nutrition Security from 2013 to 2017

#### **Discussion**

The main outcomes of the NNFSP can be summarized as follows: responsibilities of the eight involved organizations were agreed through signing a memorandum; and requirements for establishing the document including an appropriate structure, human, and financial resources, have been considered. Moreover, executive operation of the document was monitored by supervising committees. Evaluation of the document after 2 years showed the average adaptation of the NNFSP Document goals was 52.6%. The average adaptation of the document establishment method to desired state was 41%. The best success was found in the existence of an evidence-based program, a coalition of policy implementation, and indicators for monitoring the progress of the document. The least success was related to the weakness of public justification and participation and lack of ranking and encouraging partners' function.

The independent evaluation which was conducted after approving World Food Program (WFP)'s nutrition policy in 2012 provides an evidence-based assessment of the policy's quality, initial results, and factors affecting its implementation too. It was concluded that the policy was timely and accessible, and provided a useful analytical framework for nutrition.<sup>[25]</sup>

The government of Bangladesh formulated a national food and nutrition policy and approved it in 2006. Qualitative methods, including observational techniques, in-depth interviews of the key informants, and focus group discussions, were used. The strengths of the policy were as follows: a consensus document that emphasizes human rights, was formulated by a multisectoral approach, and complements other government policies, and has broad goals and wide-ranging objectives. The weaknesses include lack

of implementation, monitoring, and evaluation guidelines; lack of strong government commitment; inadequate support of policy makers; perhaps an excessively ambitious target; and ignorance of past lessons learned. The opportunities include the scope of social mobilization, the wide scope of the policy, suggested programs and measures to improve nutritional status, a congenial policy environment, and the ability to modify the scope of the policy as needed. The threats to the policy are lack of knowledge of the policy, lack of resources to implement the policy, tension between technical people and bureaucrats, vested business interests, and, possibly, discontinuity of political commitment.<sup>[8]</sup>

Fragmented decision-making and resistance to change in moving from the country's traditional focus on food availability to a more holistic vision of food security and nutrition was identified as the main challenge of food security in a political economy analysis in Bangladesh. Policy dialogue, as a key component of budget support was suggested to discuss key policy issues with the governments. There was a need to strengthen the steering mechanism with regard to funding and financing mechanisms in evaluation of Norwegian nutrition policy and the Dialogue Forum was acknowledged by all informants as an important step toward improving collaboration between actors, too. [9]

In 2011-2012, an expert group applied an intersectoral participatory approach to evaluate the implementation of Food and Nutrition Action Plan 2003-08 in Albania. The experts employed the quantitative and qualitative methods to measure the achievements of the individual goals of the Plan. The results revealed that the implementation process has faced serious barriers linked to the design of the plan, which did not accurately anticipate a theoretical framework, or structured methods for its implementation. Other impeding factors included the lack of institutional/ infrastructure support, lack of intersectoral coordination and motivation, as well as insufficient capacities and know-how. Similar to the present study, participatory approaches that involve all relevant sectors and actors in the development, monitoring and evaluation of the implementation of public health policies based on comprehensive action-oriented assessments was of key importance to improve nutritional wellbeing and health outcomes.[14]

Similar weaknesses including lack of governmental commitment and support was found in the evaluations conducted by different countries. In a review of the empirical nutrition policy literature, researchers identified 18 factors that drive commitment, organized into five categories: actors; institutions; political and societal contexts; knowledge, evidence and framing; and, capacities and resources. Irrespective of country context, effective nutrition actor networks, strong leadership, civil society mobilization, supportive political administrations, societal change and focusing events, cohesive and resonant

framing, and robust data systems and available evidence were commitment drivers.<sup>[27]</sup>

Economic, political, social, technological, environmental, and international trends in the years of program implementation could have influenced its progress: the unstable economic growth, the massive displacement of post-election directors, and the existence of known economic corruption in the society affecting the trust and performance of managers gradually decline in social capital between 2004 and 2014, reduction of water resources and drought in the country and the sanctions that exist in most of the program's implementation years can be accounted as the negative effects of macroeconomic trends.<sup>[28]</sup>

Despite structural disagreements in several of the main responsible organizations for food and nutrition security, 52% success of the document depends on continuous cooperation and holding two-weekly monitoring and follow-up sessions of the Food and Nutrition Security Working Committee. As food insecurity affects nutritional status of children and adults, it is important to focus more on it.<sup>[29]</sup>

#### Limitations

Comparison of the progress of the country's NNFSP Document with other existing documents in Iran was not possible due to the lack of published documents for their evaluation, but comparing the progress of this document to the success rate of the third and fourth development programs of the country (25% of success), this document has had significant success in the first round. Most programs were focused on headquarters rather than the environment in the first years of the implementation, therefore, further national action has been taken, and in the coming years, by expanding environmental measures, more achievements would be attained. Although one of the strengths of this document was the existence of basic figures, however, the lack of some vital data to judge about the progress rate of the Document was evident.

## **Conclusion**

In order to further improve food and nutrition security in the country, it is necessary to improve the establishment and content of the national document. Five focus points in terms of the establishment of the National Document are as follows: improving the quality of meetings of the Food and Nutrition Security Working group, producing evidence and monitoring national document indicators, approval by the HCHFS, environmental empowerment of partners (provinces), justification of public opinion, and community participation in the implementation of the national document.

The lessons learned from this experience are that despite structural disagreements in several of the main responsible organizations for food and nutrition security, [30]

the collaboration strategy has succeeded in replacing contradictions with consensus and progression. Therefore, it is recommended to target avoiding structural changes while saving time, strengthening intersectoral capacity for collaboration, encouraging partners, and empowering the environment of the provinces in the coming years.

## Ethical committee approval and funding

This work was approved by Ethical Committee of National Nutrition and Food Technology Research Institute, Faculty of Nutrition Sciences and Food Technology, Shahid Beheshti University of Medical Sciences and supported by the Iranian Ministry of Health, Department of Community Nutrition, and National Nutrition and Food Technology Research Institute (grant number 3950).

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## **Conflicts of interest**

There are no conflicts of interest.

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### References

- Ghassemi H, Harrison G, Mohammad K. An accelerated nutrition transition in Iran. Public Health Nutr 2002;4:149-55.
- Seyedhamzeh S, Damari B. The conceptual model of food and nutrition security in Iran. Community Health 2017;4:228-37.
- Kennedy E, Webb P, Walker P, Saltzman E, Maxwell D, Nelson M, et al. The evolving food and nutrition agenda: Policy and research priorities for the coming decade. Food Nutr Bull 2011;32:60-8.
- 4. National Food and Nutrition Technical Working Group. Rwanda

- National Food and Nutrition Policy (2013-2018). Republic of Rwanda, Kigali; 2014.
- FAO. Review of food and agricultural policies in Malawi. MAFAP Country Report Series. Rome, Italy, 2015.
- Babu SC. Multidisciplinary capacity-strengthening for food security and nutrition policy analysis: Lessons from Malawi. Food Nutr Bull 1997;18:1-13.
- Chakraborty D. Food Security in India: Policy challenges and responses. New Delhi: Rajiv Gandhi Institute for Contemporary Studies, The Royal Institute of International Affairs; 2005.
- 8. Mannan MA. An evaluation of the national food and nutrition policy of Bangladesh. Food Nutr Bull 2003;24:183-92.
- WHO. Evaluation of the Norwegian Nutrition Policy with focus on the Action Plan on Nutrition (2007-2011) nutrition policy with a focus on the Action Plan on Nutrition 2007–2011. Copenhagen, Denmark: The WHO Regional Office for Europe; 2013.
- Milio N. European food and nutrition policies in action. Finland's food and nutrition policy: Progress, problems and recommendations. WHO Reg Publ Eur Ser 1998;73:63-75.
- Roos G, Lean M, Anderson A. Dietary interventions in Finland, Norway and Sweden: Nutrition policies and strategies. J Hum Nutr Diet 2002;15:99-110.
- Ministry of Health of Brazil, National Food and Nutrition Policy.
   Brasilia DF: Ministry of Health of Brazil, Secretariat of Health Care, Department of Primary Health Care; 2013.
- ES T. abbreviated report of the WHO Western Pacific Region Workshop on National Plans of Action for Nutrition: Key elements for success, constraints and future plans. Biomed Environ Sci 2001;14:87-91.
- Mersini E, Hyska J, Burazeri G. Evaluation of national food and nutrition policy in Albania. Zdr Varst 2017;56:115-23.
- Lloyd-Williams F, Bromley H, Orton L, Hawkes C, Taylor-Robinson D, O'Flaherty M, et al. Smorgasbord or symphony? Assessing public health nutrition policies across 30 European countries using a novel framework. BMC Public Health 2014;14:1195-2015.
- Sadler M, Ashwell M, Buttriss J, Govindji A, Harland J, Stirling-Reed C, et al. Developments in nutrition: 20 years back, 20 years forward. Brit Nutr Bull 2016;41:180-7.
- 17. Phulkerd S, Lawrence M, Vandevijvere S, Sacks G, Worsley A, Tangcharoensathien V. A review of methods and tools to assess the implementation of government policies to create healthy food environments for preventing obesity and diet-related non-communicable diseases. Implement Sci 2016;11:15-28.
- Damari B, Abdollahi Z, Hajifaraji M, Rezazadeh A. Nutrition and food security policy in the Islamic Republic of Iran: Situation analysis and roadmap towards 2021. East Mediterr Health J 2018;24:177-88.
- Damari B, Mohammadi-Nasrabadi F. National Nutrition and Food Security Document evaluation, 2013-2015. Tehran: Office of Community Nutrition Improvement, Deputy of health, Iranian Ministry of Health; National Nutrition and Food Technology Research Institute and National Institute of Health Research 2018.
- Goshtaei M, Ravaghi H, Sari AA, Abdollahi Z. Nutrition policy process challenges in Iran. Electron Physician 2016;8:1865-73.
- Yazdi-Feyzabadi V, Haghdoost A, Noori A, M MS, OlyaeeManesh A, Esmaili M, et al. Performance assessment of provincial health and food security workgroups in Iran. Hakim Health Sys Res 2014;17:268-77.
- 22. Damari B, Vosoogh-Moghaddam A, Salarianzadeh H. 3 years

- performances of the Provincial Health and Food Security Councils in I.R.Iran: The way forward. J Sch Public Health Inst Public Health Res 2012;10:21-8.
- Ghodsi D, Omidvar N, Eini-Zinab H, Rashidian A, Raghfar H. Impact of the national food supplementary program for children on household food security and maternal weight status in Iran. Int J Prev Med 2016;7:108-14.
- Bourne L. Making Projects Work: Effective Stakeholder and Communication Management. USA: CRC Press, Taylor and Francis Group; 2015.
- 25. Baker P, Hawkes C, Wingrove K, Demaio AR, Parkhurst J, Thow AM, et al. What drives political commitment for nutrition? A review and framework synthesis to inform the United Nations Decade of Action on Nutrition. BMJ Glob Health 2018:e000485. doi: 10.1136/bmjgh-2017-.
- 26. FAO. Strengthening Sector Policies for Better Food Security

- and Nutrition Results: Political Economy Analysis. Rome, Italy: Food and Agriculture Organization of the United Nations; 2017.
- Lister S, Allan S, Keylock J, Sadler K, Walters T. WFP's 2012 Nutrition Policy: A Policy Evaluation. Mokoro Limited, WFP Office of Evaluation; 2015. Contract No.: OEV/2014/22.
- Damari B, Hajian M, Minaee F, Riazi-Isfahani S. The impact of future world events on Iranians' social health: A qualitative futurology. Iran J Public Health 2016;45:795-805.
- 29. Minaie M, Movahedi A, Motlagh A, Abdollahi Z, Djazayery A. Association of socioeconomic status and food security with anthropometric indices among 2–5 years old urban children in 8 different cities in Iran. Int J Prev Med 2019;10:173-9.
- Loloei S, Moghaddam AV, Abdollahi Z, Damari B. The role of national sectors in food and nutrition security: The experience of the Islamic Republic of Iran. J Nutr Food Security (JNFS) 2018;3:86-93.