Provision of Public Goods in an Islamic Economy

MUHAMMAD RAMZAN AKHTAR

1. INTRODUCTION

Islam establishes a welfare society. It obligates the society to make arrangements for need-fulfilment of all citizens. The Islamic economy working with the market and non-market institutions and guided by Islamic values meets the personal and public needs of its people. The market system in a secular economy under appropriate conditions can efficiently meet personal needs of the people; however, it fails to do so in case of public goods. While supplementing the market system with other institutions, the Islamic economy manages to supply optimal quantity of the public goods. The paper studies this issue in the light of the Qur'an, the Sunnah, and Islamic history.

2. ISSUES INVOLVED IN THE PROVISION OF PUBLIC GOODS

The public good is defined to be a good the consumption of which by one person does not reduce its availability to others in society. If we denote Z as the total quantity supplied of a pure public good and Z_a and Z_b quantity consumed by individuals A and B, then we can write $Z=Z_a=Z_b$. The equality signs show that there is no extra cost in supplying a given quantity of a public good to additional people although its production involves extra cost. Moreover, once a public good is supplied to individual A, it is difficult to exclude individual B from enjoying its benefits. Defence, lighthouses, police protection, and clean environment are examples of public goods. There are very few pure public goods in the real world while many goods reflect features of both public and private goods. These goods are called mixed goods. Education and health are examples of such goods.

In our discussion by public goods, we mean both pure and mixed public goods. Efficient supply of these goods encounters specific problems in the market-type system. The demand of such goods faces the free-rider problem. A large umber of people simultaneously participate in enjoying a public good. Each one knows that it is

Muhammad Ramzan Akhtar is Professor of Economics at the International Institute of Islamic Economics, International Islamic University, Islamabad.

¹In all references to the Quran in this paper, the first number refers to the *surah* and the second to the *ayah*.

impossible to exclude him from its enjoyment. Therefore, he tries to be a free-rider and avoids payments. Consequently, a smaller quantity of these goods is produced, the implications of which may be quite dangerous.

The market system fails to meet the social demand of public goods due to externalities and the market failure problem. Because of these problems, the market-type system cannot both determine the optimal level of demand for public goods and deliver its supply. Inevitably, the political governments make decisions about the optimal level of demand for public goods and finance their supply through public budget.

3. ISLAMIC VALUES, INSTITUTIONS, AND THE PROVISION OF PUBLIC GOODS

Islamic economy supplies the optimal amount of public goods with the help of the market system. The market institution, while producing a significant amount of public goods, creates the pollution problem—the intensity of which can be considerably reduced by the observance of Islamic values.

Market System

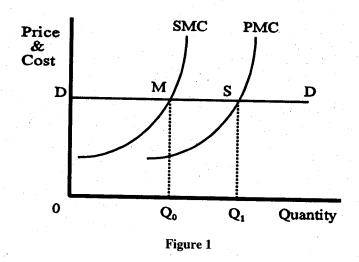
The economic agents in an Islamic economy seek the wider goal of "pleasing Allah" by serving the humanity. Service to humanity induces them to expand the useful and contract the harmful activities. Accordingly, the producers tend to include welfare of the society as an argument in their profit functions. A Muslim producer keeping social interest in view restricts or expands output if it produces pollution or emits beneficial effects. His decision-making is guided by the principle of equalising market price to the marginal social cost, which is defined as the sum of private and external marginal cost.

For an illustration, assume a firm operating in competitive environment generates a certain quantifiable amount of pollution per unit of output. A Muslim and secular producer are likely to make different output decisions in this environment. A Muslim producer is likely to restrict the level of output while a secular producer will not. Their likely choices are represented by the points M and S, respectively, as shown in Figure 1.

The firm is facing a horizontal demand curve DD. Private marginal cost is represented by PMC. Under the assumption that the firm is generating a certain amount of pollution per unit of output called external marginal cost (EMC), the SMC is obtained by adding PMC and EMC. A Muslim producer chooses point M and a secular producer chooses point S on the demand curve.

²"I may work righteousness such as though mayest approve..." the Quran, (46-15).

³The Prophet (PBUH) said, "All human beings are dependents of Allah and the most beloved of them before Him is he who is good to His dependents." Walial-din-Tabrizi, *Mishkat al-Masabih*, Vol. 2 0-413m 4998.



The level of output implied by point M is lower than S because OQ is to the left of OQ_1 . It also reflects the optimum level of output from the social point of view. This means that the quantity of pollution in an Islamic economy is likely to be lower than in a secular economy. Thus, the framework of an Islamic economy leads to socially optimum allocation of resources if there exists a divergence between the private and the social cost of production.

Islamic State

Islamic state bears ultimate responsibility of need-fulfilment of its citizens. Normally, it does not interfere with the market forces. However, in cases of market failures, it plays a proactive role. For brevity, we focus on its role in the education sector. It is essential to stress that education is treated as a public good in an Islamic economy.

The early Islamic state assigned prime importance to education. The Prophet (PBUH) freed the educated prisoners of Badar's war on the condition that each one of them would teach 10 Muslims. The Prophet (PBUH) sent the Sahabah in different parts of the state to teach religious and basic knowledge to the people. Similarly, the four rightly-guided Caliphs also attached great importance to education. Umar (RA) set up a wide network for public instruction. Primary schools were opened throughout the state where people were taught in groups while a Sahabi would watch them. Knowledge of Islamic law was made compulsory. Every citizen was required to learn at least five Surahs: al-Baqarah, al-Nisaa, al-Maida, al-Hajj, and al-Nur, as these

⁴Muhammad Bin Yazid al-Qazoni, Sunun Ibn Maja, Vol.1, p. 81 (224).

contained the core commandments and injunctions of Islam.⁵ Governors of provinces and commanders of the forces were required to teach religion and law to the people in their jurisdiction. All expenses incurred in this respect were met by the *Bait-al-Mal*.

Basic and religious education are activities the social benefit of which exceeds the private benefit to a recipient. For example, a Muslim obtains knowledge of saying correct prayer. Later on, he passes it on to many people inside and outside the family. This leads to correcting of prayers and other material activities of so many people due to the effect of prayer. The propagation of religious knowledge and basic education is thus a case of full subsidisation. Figure 2 illustrates this case.

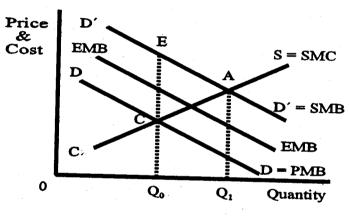


Figure 2

In the absence of state intervention, DD and SS represent the market demand and supply curves for education, respectively. The demand curve reflects individual's valuation of education, i.e., private marginal benefits (PMB). The external benefits (provided by the education to the society) are shown by the external marginal benefit curve (EMB), while the social marginal benefit (SMB) curve shows the vertical sum of PMB and EMB. In the absence of any subsidy, OQ quantity will be demanded and supplied at OP price. Now, the state gives a subsidy equal to the amount of EMB which will shift the demand curve for education upwards by the full amount of subsidy to D'D'. The equilibrium quantity now increases to Pareto-optimal level of QO₁ where the marginal social cost and benefit are equal. Net increase in social welfare due to the extra quantity of education will be equal to the area lying under triangle ACE.

Non-religious education like scientific and technical education is essential for economic growth and poverty alleviation. It raises the earning power of individuals. Moreover, it helps people better use their nutritional and environmental resources. From

⁵Shibli Numani *Omar the Great*, tr. by Muhammad Saleem, p. 431.

⁶The Quran says, "....For prayers restrain from shameful and unjust deeds...." (29:45).

the standpoint of society, the number of people likely to benefit is larger than the number of educated people. Therefore, for maximising social welfare, even the non-religious education cannot be left to be determined by market forces. It is another case of subsidisation, the logic of which is illustrated in Figure 3. Figure 3 employs the same set of curves as used in Figure 2. Since SMB exceeds PMB, therefore a subsidy equal to the amount of EMB is warranted. The grant of this subsidy by the state shifts the demand curve to D'D'. As a result, equilibrium quantity increases to QQ_1 which increases social welfare by an area equal to triangle ACE. The grant of subsidy again leads to optimal allocation of resources in this case.

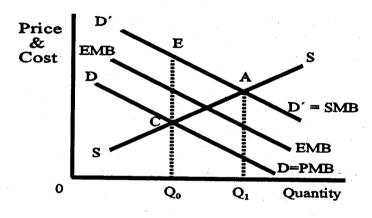


Figure 3

Voluntary Institution

The voluntary institutions have always played a vital role in poverty alleviation, furthering of knowledge and education, and promotion of social welfare activities in the Islamic society. These institutions contribute in the form of charity, gift, grant, a will in the legacy and *awqaf*. Here, the interest is to reflect the role of *Waqf* institution in catering to the demand for drinking-water in the Islamic economy. It goes without saying that Islam recognises water as essential for human life. One *hadith* says: "People are partners in three things: water, fodder, and fire". Islamic teachings thus motivate Muslims to extend the fullest co-operation in providing drinking-water to the

⁷A stimulating account of this institution is given in A.A. Islahi's paper, "Provision of Public Goods: Role of Voluntary (*Waqf*) Sector in Islamic Economy", which was presented at the Third International Conference on Islamic Economics, held in Malaysia (28-30 January, 1992).

^{8&}quot;... We made alive everything with water ..." The Quran (21:30).
9 Yahya Bin Adam *Kitab-ul-Khirai*. p.123.

people. Companions of the Prophet (PBUH), inspired by Islamic teachings, made voluntary arrangements for providing drinking-water facilities. Some of these arrangements are mentioned below.

Muslims were facing an acute shortage of water after their migration to Medina. Usman (RA) bought the only drinking-water well in Medina from a Jew and made it a Waqf for the benefit of all people. In addition, he arranged for the construction of several other wells and dedicated them for public use. Ali (RA) dedicated a well called Bier Malik. He also dedicated several streams for the purpose. Similarly, other Companions of the Prophet (PBUH) also dedicated drinking-water wells for the use of common people. It is important to note that these voluntary actions took place before the construction of drinking-water wells by the state. Even after their construction, the voluntary actions continued and supplemented state efforts to ensure optimal supply of drinking-water in the economy.

It is important to stress that the free-rider problem does not arise if public goods are provided through voluntary institution in general and through *Waqf* institution in particular. The reason is that the dedicator desires that more and more people benefit from the property dedicated. Islamic history shows that *Waqf* institution provided many public goods freely to the people and this resulted in wide dissemination of positive externalities in the economy.

Unit of Supply

Islamic economy supplies public goods through a network of inter-related institutions, which reduces the cost of delivering these goods. This network includes the departments of federal, provincial, and local governments operating in an integrated structure of the Islamic state. The structure provides decentralisation and vests wide economic and administrative powers in the provinces to realise the goals of needfulfilment of the people. The central and the provincial governments supply those goods which they can do efficiently. For instance, defence and religious education were earlier provided by the central government while water and non-religious educational facilities were provided by the provincial governments. The evidence reveals that the central government allowed the provinces to collect *Zakah* and other revenues for the welfare of local people. Provinces had, therefore, the means to provide specific public goods through these revenues. Many services like rest houses, health clinics, and

¹⁰Op. cit., p. 63.

¹¹A tradition of the Prophet (PBUH) says, "He who grows a crop or plants a plant which a person or beast or bird eats, that will be accounted as an act of *Sadaqah*". (Yahya bin Adam, *Kitab al Khiraj*, p. 82.

¹²Abdul Salam Nadvi, "Uswah-i-Sahabah" (Urdu), p. 61.

¹³Abdul Khaliq, "Concept of Regional Rights in Islam", (Urdu), pp. 18-31.

¹⁴ Ibid.

schools were voluntarily provided by *Waqf* institutions and local people. It appears from the study of these institutions that the nature of the benefit of public goods determined the unit of supply. If the benefits of a public good were widespread, then the central government arranged its supply throughout the state. On the other hand, if the benefits were localised, then the provincial or local governments were responsible for its provision. From the efficiency point of view, this was the best arrangement.

4. CONCLUSION

This paper has discussed the provision of public goods in an Islamic economy. It notes an obligation of this economy to satisfy the basic needs of all people, which in part depends on the satisfaction of public goods. In this context, it discusses the free-rider and externality problems. The paper argues that Islamic economy is in a better position to address these problems than its counterpart secular economy. Accordingly, this economy can supply the optimal amount of public goods.

The paper finds an active role for the Islamic state. It acts independently as well as in conjunction with the market and non-market institutions in the economic arena. In this context, it discusses the role of the state in providing religious and basic education, which brings substantial welfare benefits to the society. In addition to its role in the public sector, the Islamic state strengthens the role of the private sector through the incentive system.

The paper finds that the voluntary institutions were the main source of supply of public goods. Focusing on drinking-water, it finds that the social demand for drinking-water was initially met through *Waqf* institution. Such institution generated long-term benefits for the maximum number of people.

In sum, it is found that an Islamic economy is capable of meeting the social demand of public goods with the help of its institutions and value system.