Bonded Labour in Pakistan

Nadeem Malik

Development Studies Program, School of Social and Political Sciences, The University of Melbourne, Parkville, Australia
Email: malikn@unimelb.edu.au

Abstract

Bonded labour is widespread in Pakistan. This paper is an attempt to illustrate the nature of bonded labour in the agricultural sector and the brick kiln industry in the country. Despite the introduction of Bonded Labour System (Abolition) Act 1992, bonded labour thrives because of the power and influence of big landlords in rural and factory owners in urban localities. It is argued that without effective land reforms or land distribution bonded labour cannot be eliminated. In additional to land reforms, effective governance based on strong democratic culture free of the influence of big landowners is essential to address the issue of bonded labour in Pakistan.

Keywords

Bonded Labour, Debt Bondage, Agriculture, Brick Kiln Industry, Land Reforms

1. Introduction

Bonded labour is a modern form of slavery. A person is enslaved as a bonded labourer due to debt bondage when his or her labour is acquired as a way of paying a certain loan. Quite often bonded labourers are subjected to physical and sexual violence. They live under various forms of surveillance (at times through armed guards). Confined to their vicious routine of life trapped in bondage their stories represent a period of history that is reminiscent of medievalism or slavery.

Zaidi (2001: p. 12) claims that, “there is considerable confusion over the term “bonded” labour and for this reason, perhaps, there is almost no empirical evidence to support the claims of the nature and extent of what is called “bonded labour”. However, others have used the term “bonded labour” interchangeably with “debt bondage”.

The ILO Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices similar to Slavery (1956) defines debt bondage as:

“the status or condition arising from a pledge by a debtor of his personal services or those of a person under his control as security for a debt, if the value of those
services as reasonably assessed is not applied towards the liquidation of the debt or the length and nature of those services are not respectively limited and defined” (ILO, 1956: p. 1).

Article 7(b) of the Supplementary Convention characterises debt bondage as a “servile status” and obliges state parties to implement national provisions to abolish it (ILO, 1956: p. 3). Bonded labour or debt bondage is probably the least known form of slavery today, and yet it is the most widely used method of enslaving people (Anti-Slavery International, 1996).

In South Asia, especially in India, bonded labour also includes other forms of forced labour practices such as “begaa”1 and labour accrued through “caste obligation” (Breman, 2003). Caste obligation compels members of certain communities, such as the Dalits, to perform particularly undesirable types of public work, such as removing dead animals from public areas of the villages in which they live (Breman, 2003).

In Pakistan, bonded labour is widespread in agriculture, brick kiln work, tanning, and carpet industries. According to the Constitution of Pakistan, debt bondage is prohibited by the Bonded Labour System (Abolition) Act 1992. Pakistan has also ratified ILO Convention 29 on bonded labour. Despite such legislations, however, the real conditions of bonded labourers remain the same. The PILER study on bonded labour has estimated the range of persons in bonded sharecropping families to be 1.8 - 6.8 million throughout Pakistan (Muhammad & Aly, 2000). Commenting on huge discrepancies in these estimates, Zaidi states that:

Given the lack of statistics and adequate data, either about overall debt or its bonded nature, and large differences in definition, such huge discrepancies between different estimates are likely to arise (Zaidi, 2001: p. 14).

Even if one would consider the lower end of the PILER estimate, it would account for five percent of the 40 million below the poverty line in Pakistan (Zaidi, 2001: p. 14)2. A 2004 Survey of Brick Kilns in Punjab, Pakistan, by the Federal Bureau of Statistics found that nearly 90 percent of brick kilns workers were bonded (ILO, 2004: p. 29).

Although poverty is prevalent in parts of South Asia and especially in Pakistan, the dark side of poverty in the form of bonded labour in the region has only recently come into light (Churchill & Guérin, 2004). This paper is an attempt to illustrate the nature of bonded labour in the agricultural sector and the brick kiln industry in Pakistan. It is argued that without effective land reforms or land distribution bonded labour cannot be eliminated. In additional to land reforms, effective governance based on strong democratic culture free of the influence of big landowners is essential to address the issue of bonded labour in the country.

2. Bonded Labour in Agriculture

Since independence agriculture has made a considerable contribution to GDP. During

1 ‘Begaar’ is a traditional form of forced labour and free work traditionally imposed, mostly on scheduled castes in agriculture.
2 Reliable latest estimates are not available.
the 1960s, the share of agriculture in GDP was 65% (Economic Watch, 2001), whereas, today it contributes a mere 25% but still provides 65% of total exports and employs 45% of total labour force in Pakistan (Economic Survey of Pakistan, 2015). Around 67.5 per cent of the population in Pakistan depends directly on agriculture. Of the total number of farmers, roughly 93 per cent own just 36 per cent of the land and live on the minimum level of income (Malik, 2014). Ever since independence, due to the inept policies of various governments, there has been no real effort to improve agriculture and the farming community has suffering. The result is low productivity and low returns to farmers, pushing a vast majority of them to live below poverty line (Malik, 2014). The lack of effective land reforms has given birth to distorted patterns of landownership and exploitative production practices resulting into poor agricultural productivity and miserable conditions for small farmers and landless peasants. Without effective land reforms or “land distribution supplemented by credit and other support, along with a change in land tenurial relations, it is improbable that the economic (poverty) issue of bonded labour (or sharecroppers, more generally) will be addressed” (Zaidi, 2001: p. 19).

In 2014 during my field work on rural governance in a few villages in central Punjab, I met a bonded labourer Suleman Ahmed and came to know of his story. He was a small tenant farmer or what is known as “free tenant farmers”. The free tenant farmers like Suleman do not have access to resources such as land, capital or bank credits. The only resource they have is their labour. Suleman, therefore, entered into a tenancy contract with a landowner offering labour as rent for a piece of land to cultivate maize. Generally, there are two most common types of tenancy contracts: 1) sharecropping and 2) fixed-rent contract. In a sharecropping contract, the tenant shares a certain agreed upon portion of agricultural output either in cash or kind that may vary according to total output being achieved in the end (in most cases it is 50 percent of the produce). On the contrary, in a fixed-term contract, no matter the end output is good or bad, the tenant pays a fixed amount of cash or share a fixed amount of output in kind. Different types of contracts have different implications for tenant farmers e.g. in the first case the tenant is has to share 50 percent of the harvest no matter it is good or bad. In the second case it is only the tenant farmer who suffers if the output is bad as the amount of rent is fixed. In all cases poor tenant farmers are dependent on landlords for credit required for agricultural inputs, as they lack collateral to access bank loans. In the case of bad harvest, in most cases, farmers with fixed-term tenancy contracts are not able to pay the loan and fixed profits.

It is the above situation, Suleman was caught into. The harvest went bad due to pest and bad pest management accruing loses. Far from paying off fixed rent, Suleman had to pay off his loan for inputs from the landlord as well. Having no access to credit from banks, he had to resort to money lenders which further increased his debt. In such dire circumstances, the landlord trapped him into bonded labour and Suleman had no idea when he would be free or whether he would ever be free from the chains of slavery.

Due to sensitivity of issues discussed, I have used pseudonyms for individuals and places in this paper.
What follows from above is that bonded labour in agriculture is perhaps the most significant example of exploitation of landless peasants in rural areas. In addition, it is prone to concealment throughout the country. Despite introducing Bonded Labour System (Abolition) Act 1992 and ratifying to ILO’s conventions against bonded labour, the state of Pakistan never paid much attention to this crucial issue. Lack of will to introduce proper institutions to deal with the menace of bonded labour on one hand, and social acceptance of this phenomenon in highly authoritarian and hierarchical rural society, on the other, have contributed to the lack of appropriate actions against the practice of bonded labour by the state and society in Pakistan. Further, extreme poverty, non availability of jobs and inequalities in the society have significantly created conditions for the poor to fall into the trap of bonded labour.

As mentioned earlier, the agricultural sector is the major site of debt bondage, particularly for sharecroppers. The situation of sharecroppers is considered to be most abject in lower Sindh, followed by southern Punjab (Martin, 2009). They live like prisoners isolated from the rest of the world. Commenting on their lives, Martin (2009: p. 2) states:

“Landlords in these areas are known to have maintained private jails where labourers were kept locked up and guarded by armed men at night, and sent to labour in the fields by day. Female labourers were frequently assaulted by landlords and their strongmen as well as by the police who were complicit in the maintenance of these jails. In 1991, in a widely publicised case, the army raided the private jail of a major landlord in Sindh and released 295 labourers”.

Due to extreme poverty in rural areas poor peasants (such as Suleman) dependence on rich landlords to have access to land on rent and agricultural inputs is complete. Such dependence leads them into debt bondage converting them into slaves. They are not allowed to leave landlords farms without paying off the loans. The workers appear to be independent tenants, but in reality, they continue to be bonded labourers. As the case of Suleman demonstrates, the tenants borrow money from their landlord for seeds, fertilizers and other farming costs. These costs add to the share that goes to the landowners effectively rendering the tenants’ return insufficient for them to repay the loan, thus bonding them to the landowners. Factors such as the informality of contracts, minimal wages and the lack of formal education of those who sign them enable employers to circumvent existing labour laws, binding workers into persistent or repeated debt bondage, where at the end of a contract a worker may find that he/she owes a debt to an employer with whom he/she has then no option but to enter into a new contract to pay off that debt. The end result is that the debt keeps unfairly accumulating, forcing generations of people in debt bondage and forced labour. Bonded labourers are also sold by one owner to another.

Further changes to bonded labour are occurring. Historically, the work contract established between the employer and the head of the household required all members of labourers’ families to work for the employers, and individual family members did not
need to establish such contracts with the employers. Women and girls are now, however, increasingly bonded in their own right. They are often bonded in domestic work, carpet making, and weaving industries (Khan, 1999).

Martin (2009) has argued that the phenomenon of bonded labour also relies on the patterns of patronage. Despite the fact that patronage allows for acts of benevolence by landlords, it does nothing much to free bonded labourers from the clutches of landlords. Through a case study of debt bondage in a village in the central Punjab, he demonstrates that:

… the landlords’ role as patrons in a village in the central Punjab stemmed from their monopoly over local state institutions, economic resources and the means of physical coercion. This monopoly worked to make the rest of the village population dependent upon landlords for their basic welfare and security as well as their livelihoods. Furthermore, landlords’ exclusive control over resources enabled them to extend assistance strategically, deploying it in the idiom of generosity and patronage in order to obtain votes and labour and, in the process, further strengthen their stranglehold over villagers. Thus, I argue that, despite the paternalistic ideology of generous care and protection invoked by the landlords, the extension of patronage to labourers was frequently used as a means to secure cheap and permanent labour (Martin, 2009: p. 2).

It is well recognised that Pakistani society is dominated by big landowners and tribal leaders. The society is organized around family, kinship, caste and tribe dominated by feudal lords and tribal heads. Democratic norms and values have always been weak giving way to autocratic, authoritarian and paternalistic norms. As a result no political force was powerful enough to change the power base of these landlords. The influence of these landlords extends from the local to the national levels of administration. It is through such control that they maintain their patronage system that does not act as a mitigating tool to free bonded labourers; instead it further strengthens bondage. Also it is due to their power and influence at the local and national levels of governance that no government in Pakistan has ever given priority to eliminate bonded labour.

3. Bonded Labour in Brick Kiln Industry

The brick kiln industry that involves moulding and firing of bricks from clay employs men and children as bonded labourers. These industries are small-scale manufacturing units on the outskirts of urban areas (PILER, 2004). They also exist in rural localities. Bonded labourers involved in this industry are usually landless families belonging to poor classes and ethnic minority groups. Children working at brick kilns are largely regarded as part of a bonded family unit and work alongside their parents with only the head of the family receiving remuneration. There are also cases, however, where children inherited debts from parents and became bonded as individuals for a long period of time (PILER, 2004).

The mode of bondage is somewhat similar to bondage in the agricultural sector.
People are trapped in debt bondage as a consequence of their inability to repay loans or cash advances. Albeit, due to abject poverty, such advances serve labourers and their families immediate needs, they become cause of their slavery in the long run. A combination of factors such as high interest charged on cash advances, low wages offered to labourers and forged entries in account books weakens labourers and strengthens bondage (Hussain, 1997).

The families that are involved in brick kiln labour are completely dependent on their owners. The indebtedness occurs through the Peshgi (advance) system under which the labourers borrows from the owner to fulfill their family’s consumption requirements (Hussain, 1997). The loans, which are provided to these labourers act as traps as they persists across generations (Hussain, 1997). Since repayment period in many cases last for several generations the families virtually become prisoners and need special permission from kiln owners to leave the premises even for a short period (Hussain, 1997).

The situation of women and children in bondage is more vulnerable. Women are an integral part of the labour force in the brick-kiln industry (HRCP, 2011). They not only work for the same hours and days as men, they do the household work as well. Also, they do not have the provision of maternity leave (HRCP, 2011) and are expected to work during their pregnancy. On occasions of illness or even a death in the family, they are forced to work. A system of prostitution dens also runs at some of the kilns (HRCP, 2011). Rape and other forms of physical abuse of women have also been reported (Hussain, 1997).

Children make up a significant part of the brick kiln work force as well. It is noted that around 60% of the children who start work with their families at the kiln are below the age of 13 (HRCP, 2011). These children are usually the siblings of their parents or are grandchildren of a person who was the original debtor. They are denied the freedom to move out of the kiln premises and the mortality rate amongst them is very high (HRCP, 2011). Blindness is common in child labourers working under the obligation of debt bondage of their adults and about one out of twenty families have blind children (HRCP, 2011). They are kept as hostages when their parents leave the kiln premises (HRCP, 2011).

With regard to children in the brick kiln industry Hussain (1997: p. 64) states:

The study on working children in the brick kilns of Sindh notes that the children witness the cruel treatment of their parents by the owners, and grow up in an atmosphere of fear, insecurity and subjugation, which has a long lasting effect on their personality development. Interviews with parents and observation of children provide evidence of malnutrition, skin diseases due to contact with clay, dust and exposure to intense heat, as well as respiratory infections. Another study in NWFP showed that child workers in the brick industry suffered 50 percent more chronic chest infections than their counterparts in neighbouring villages.

Though a Supreme Court decision in 1988 abolished bonded labour and as a result

---

4“Children Working on Brick Kilns in Sindh”, Institute of Social Research and Development, Karachi, 1990.
several bonded labourers were freed they were replaced by other workers who in turn, became bonded (Hussain, 1997). Bonded labour in brick kiln industry is still widespread despite the fact that it is illegal. It continues to thrive because of the influence of industry owners and corruption within law enforcing agencies, poverty and the lack of alternative jobs for labourers.

4. Human Trafficking and Bonded Labour

According to US Department of State (2014: p. 1), “Pakistan is a source, transit, and destination country for men, women, and children subjected to forced labour and sex trafficking”. It is largely because of bonded labour, in which landowners, traffickers, or recruiters exploit an initial debt assumed by a worker as part of the terms of employment, ultimately entrapping other family members and sometimes persisting for generations (US Department of State, 2014: p. 1). In cases where bonded labourers try to escape or seek legal assistance, police return them to their owners, who then hold labourers and their families in private jails (US Department of State, 2014: p. 1).

In 2014, I was informed by an NGO leader that the parents of young girls trapped into bonded labour sell them in the name of marriage. Quite often these girls are divorced once being sexually used by their husbands. The divorced girls are again married to others. In some cases these girls are sold many times in the name of marriage, which is a legal form of prostitution. In some cases their new husbands force them into prostitution.

Boys and girls are also kidnapped to work in “organized, illegal begging rings, domestic servitude, prostitution, and in agriculture in bonded labor” (United States Department, 2010). An NGO leader reported markets in Pakistan where girls and women are bought and sold for sex and labour. In extreme scenarios, when laborers speak publicly against abuse, landowners kidnap labourers and their family members.

Human trafficking and bonded labour has an international dimension as well. According to UNHCR report on human trafficking (2010: p. 1):

Many Pakistani women and men migrate voluntarily to other European countries for low-skilled employment such as domestic work, driving or construction work; once abroad, some become victims of labor trafficking. False job offers and high fees charged by illegal labor agents or sub-agents of licensed Pakistani Overseas Employment Promoters increase Pakistani laborers’ vulnerabilities and some laborers abroad find themselves in involuntary servitude or debt bondage. Employers abroad use practices including restrictions on movement, non-payment of wages, threats, and physical or sexual abuse. Moreover, traffickers use violence, psychological coercion and isolation, often seizing travel and identification documents, to force Pakistani women and girls into prostitution in the Middle East and Europe. There are reports of child and sex trafficking between Iran and Pakistan; Pakistan is a destination for men, women and children from Afghanistan, Azerbaijan and Iran who are subjected to forced labor and prostitution.
In short it is appalling and unacceptable that hundreds of thousands of men, women and children are exploited, abused and enslaved into bondage through human trafficking.

5. Bonded Labour and Land Reforms

The root cause of bonded labour in agriculture is the land tenure system in Pakistan, which favours those who own vast tracts of land. As mentioned earlier, landless rural labourers are dependent on such landowners for employment, credit, and access to irrigation and agricultural inputs.

The current land tenure system is a legacy of colonial land tenure system during British rule in Indian subcontinent. During the colonial period, the British privatised land for the first time in Indian history. This was done through the law of permanent settlement in 1871, through which the land was given on a permanent basis to the families loyal to the British administration (Hassan, 1983). Thus the class of landowners was created. Kosambi (1975) calls the mode of production before colonial period as “feudalism from above” and after colonialism as “feudalism from below”. Feudalism from below continued in post-colonial Pakistan. Land-owning families control and govern rural areas (Malik, 2009). The colonial legacy created complex modes of governance. For example, the formation of the modern nation state destroyed village economic self-sufficiency and linked it to the local and international markets (Malik, 2009). However, the same nation state was not sufficiently egalitarian to bring the fruits of modernisation to the village level. Villages remained traditional; however, these traditions were governed not by self-sufficient village communities, but by the class of landowners created by the British. Such a situation might have been averted through genuine land reform, which never happened.

In short the lack of effective land reforms in the country has served the interests of landowners to hold power in politics and society by possessing vast tracts of agricultural land. In post colonial Pakistan the first land reforms were introduced by President Ayub Khan in 1959. The second land reform act was introduced by Zulfiqar Ali Bhutto in 1972. A certain land ownership ceiling was set beyond which land had to be redistributed. The major issue with such reform was that the ceiling was set on land owned by individuals and not families (Herring, 1979). Big Landowners were thus able to subvert the land reform act by transferring land to their own family members and land could not be distributed to poor farmers (Herring, 1979). This resulted into the failure of land reforms to bring any significant change in social hierarchies that had been established during colonial rule.

Later former Prime Minister the late Zulfiquar Ali Bhutto, introduced a National Charter for Cultivators in 1977 (Herring, 1979). According to this Charter, the state lands which were not in public use were to be given to landless farmers. However, the overthrow of the Bhutto government in 1977, and the subsequent imposition of a martial law regime, prevented the implementation of these laws.

In short, the state in Pakistan has failed to bring effective land reforms and serve
poor farmers. Some state institutions such as the judiciary in the country have played a
detrimental role in terms of safeguarding the interests of poor farmers (Siddiqa, 2007).
For example, in 1980 during Zia-ul-Haq’s military regime, the Federal Shariat (Islamic)
Court declared that land reforms were un-Islamic and, therefore, unconstitutional. This
decision was upheld by the Supreme Court in 1989 (Siddiqa, 2007).

Overall, landlords who occupy powerful position in Pakistan’s political structure
have always prevented effective land reforms and subverted even the existing ones. It is
because of the prevalence of the existing land tenure system that bonded labour is per-
vasive. Without effective land reforms, therefore, it would be difficult to overcome the
menace of bonded labour in Pakistan, especially in the agricultural sector, but also in
other sectors, as land reforms would change the power hold of big landowners giving
way to more democratic polity making the state accountable on issues such as bonded
labour.

6. Conclusion

Though prohibited since the promulgation of the Bonded Labour System (Abolition)
Act, bonded labor is widespread in Pakistan. The law could not be effectively imple-
mented due to the power and influence of landlords, brick kiln owners and rampant
corruption within law enforcing agencies. The story of bonded labourers informs us
about the nature of poverty, injustice and violence on them. Bonded labourers in urban
and rural areas are also victims of human trafficking. Regarding bonded labour in
agriculture, it has been argued that the biggest obstacle that comes in the way of elimi-
inating bonded labour is skewed landownership and the power of the landlords.

The nature of slavery within brick kiln labourers is similar to sharecroppers. Labour
unions in Pakistan are not strong enough to effectively fight against bonded labour.
Apart from men, the situation of women and children is particularly vulnerable. They
do not have the provision of maternity leave and are expected to work during their
pregnancy. On occasions of illness or even a death in the family, they are forced to
work. Children on the other hand are denied the freedom to move out of the kiln pre-
mises and the mortality rate amongst them is very high. Blindness is common in child
labours working under the obligation of debt bondage of their adults and about one out
of twenty families have blind children. They are kept as hostages when their parents
leave the kiln premises.

On the whole, the lack of effective land reforms has given birth to distorted patterns
of landownership and exploitative production practices resulting into poor agricultural
productivity and miserable conditions of small farmers and landless peasants. Without
effective land reforms or land distribution supported by credit and support for other
agricultural inputs accompanied by a change in land tenurial relations, it is improbable
that the issue of bonded labour can be addressed. In addition to land reforms effective
governance based on strong political party system that is free of patron client politics is
important. Such politics adds to the power and influence of big landlords and factory
owners and disempowers labour.
References

Anti-Slavery International (1996). This Menace of Bonded Labour; Debt Bondage in Pakistan. London: Anti-Slavery International.

Breman, J. (2003) The Labouring Poor in India. Patterns of Exploitation, Subordination and Exclusion. New-Delhi: Oxford University Press.

Churchill, C., & Guérin, I. (2004). Microfinance-Led Strategies to Eliminate Bonded Labour. www.ilo.org/public/english/employment/finance/download/churchguer.pdf

Economic Survey of Pakistan (2015). Ministry of Finance, Government of Pakistan.

Economic Watch (2001). Agriculture in Pakistan. Saar Development Research Organization and Actionaid Pakistan.

Hassan, G. (1983). Pakistan: The Unstable State. Lahore: Sang-e-Meel Pakistan.

Herring, R. (1979). Zulfikur Ali Bhutto and the “Eradication of Feudalism, Pakistan. Comparative Studies in Society and History, 21, 519-557. https://doi.org/10.1017/S0010417500013165

Hussain, A. (1997). Child Workers in Hazardous Industries in Pakistan. The Lahore Journal of Economics, 2, 59-79.

HRCP (2011). State of Human Rights in Pakistan—Annual Report. Human Rights Commission of Pakistan.

(ILO) International Labour Organization (1956). Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery.

(ILO) International Labour Organization (2004). Labour, Debt and Bondage in Brick Kilns, Rapid Assessment Studies of Bonded Labour in Different Sectors of Pakistan.

Khan, E. U. (1999). Bonded Labour in Pakistan. International Union Rights, 6.

Kosambi, D. D. (1975). An Introduction to the Study of Indian History. Bombay: Popular Prakashan.

Malik, N. (2009). The Modern Face of Traditional Agrarian Rule: Local Government in Pakistan. Development in Practice, 19, 997-1008. https://doi.org/10.1080/09614520903220834

Malik, N. (2014). Corporate Social Responsibility and Development in Pakistan. UK: Routledge.

Martin, N. (2009). The Political Economy of Bonded Labour in the Pakistani Punjab. Contributions to Indian Sociology, 43, 35-59. https://doi.org/10.1177/00699667090430102

Muhammad, N., & Aly, E. (2000). Bonded Labour in Pakistan. Karachi: Pakistan Institute of Labour Education and Research (PILER).

(PILER) Pakistan Institute of Labour Education and Research (2004). Unfree Labour in Pakistan: Work, Debt and Bondage in Brick Kilns. Karachi: PILER.

Siddiqa, A. (2007). Military Inc. inside Pakistan’s Military Economy. London: Pluto Press.

US Department of State (2014). Trafficking in Persons Report. http://www.state.gov/j/tip/rls/tiprpt/countries/2014/226793.htm

United States Department (2010). Trafficking in Persons Report 2010—Pakistan. http://www.unhcr.org/refworld/docid/4c1883d1c.html

Zaidi, S. A. (2001). The Economy, Poverty and Bonded Labour in Pakistan. Karachi: Pakistan Institute of Labour Education and Research.
Submit or recommend next manuscript to SCIRP and we will provide best service for you:

Accepting pre-submission inquiries through Email, Facebook, LinkedIn, Twitter, etc.
A wide selection of journals (inclusive of 9 subjects, more than 200 journals)
Providing 24-hour high-quality service
User-friendly online submission system
Fair and swift peer-review system
Efficient typesetting and proofreading procedure
Display of the result of downloads and visits, as well as the number of cited articles
Maximum dissemination of your research work

Submit your manuscript at: http://papersubmission.scirp.org/
Or contact aa@scirp.org
