The role of VET in recidivism in Australia

Victor Callan and John Gardner

This chapter examines the links between prisoners’ participation in the vocational education and training (VET) programs available within the Queensland prison system and their chances of returning to prison. It discusses a recent study\(^1\) which shows that prisoners involved in VET programs before their initial release are much less likely to return to custody. Overall, 32% of prisoners who did not participate in VET before their initial release returned to custody in Queensland within two years, while only 23% of VET participants returned.

Interviews with prisoners and correctional services staff reveal that the adoption of a module-by-module approach to training and dedicated training workshops in correctional centres are assisting prisoners to access VET. On the other hand, the perceived barriers to the successful provision of VET programs include the demands of programs dealing with offending criminal behaviour and the perceived lower importance of vocational education and training. Operational and funding constraints also limit prisoners’ access to training opportunities.

Introduction

National and international literature on correctional systems shows that prisoners, relative to the general population, are confronted by an extensive range of disadvantages. These include poor health and poor education, accompanied by drug, alcohol and mental health issues, poor social and communication skills, and in many cases, some level of intellectual disability (see Social Extension Unit 2002; Ward 2001). We know that adult offenders in Australia face cumulative social and economic disadvantage relative to the Australian population as a whole. They have an average school age of Year 10 or below, training levels well below the Australian average, higher rates of mental illness and greater rates of unemployment. Reports by the Australian Council for Social Service (2002) and the Australian Government Productivity Commission

\(^1\) In this study, prisoners are considered to be recidivists if they commence a new sentence in Queensland within two years of their date of release from custody for an offence, other than a fine fault. The full project report by Callan and Gardner (2005) is titled Vocational education and training provision and recidivism in Queensland correctional institutions. This and supporting documents are available from NCVER’s website at <http://www.ncver.edu.au/publications/1592.htm>.
(2004) highlight the significant impact of unemployment upon the health of individuals, on opportunities to seek affordable housing, and upon the likelihood of committing crime.

Many strategies at local, state and national levels are being put in place to assist those in prison to improve their chances of successful integration back into their families, the world of work, and their communities. In Australia, *Shaping our future: National strategy for VET 2004–2010* (ANTA 2004) and the National Strategy for Vocational Education and Training for Adult Prisoners and Offenders in Australia (ANTA 2001) aim to resolve many of these sources of cumulative disadvantage being experienced by adult offenders.

The report by the Australian Government Productivity Commission (2004) provides a profile of the correctional services of various jurisdictions, including policy developments and performance indicators. This report noted the following.

- There is a national recidivism rate of 37% of prisoners returning to prison within two years of release, and 47% returning to corrective services (either prison or community-based orders²).
- There is a growing acknowledgement nationally that the corrective services sector has an active role to play in crime prevention, especially by providing programs and opportunities that address the causes of offending, maximise the chances of successful re-integration in the community, and reduce the risk of re-offending.
- The correctional system is increasingly recognising the complexity of the circumstances and needs of prisoners, including unresolved drug and alcohol problems, backgrounds of social disadvantage, low educational attainment, poor employment history, significant health problems, and limited family and social skills.
- Various jurisdictions are developing or expanding upon a ‘throughcare’ strategy (New South Wales), or ‘end-to-end’ strategy (Queensland) or a ‘re-entry coordination service delivery model’ (Western Australia) for the integrated management of offenders throughout the correctional system.

As in most correctional systems in Australia, new prisoners are assessed in terms of their offender risk and needs. This assessment technique (described as Offender Risk Needs Inventory in Queensland) designates certain characteristics as criminogenic (for example, criminal history, illiteracy, substance abuse). The risk assessment assigns a degree of severity of criminogenic factors for each prisoner and places them in a high-, medium- or low-risk category. Related to this is the initial sentence management plan which is determined for each prisoner through interviews conducted by psychologists, education officers and VET officers who, respectively, identify specific offending behaviour and recommend educational and VET programs for each offender. In Queensland centres, a prisoner’s progress and plan are reviewed by the sentence management unit every six months.

---

² Community-based orders include non-custodial sanctions (including unpaid community work components, personal development program attendance, or home detention restrictions).
Offending behaviour programs are rehabilitation programs that are targeted towards the psychological, cognitive and behavioural factors believed to be at the core of the individual’s behaviour and which led to their imprisonment. These programs are cognitive and behaviour-based and are aimed at reducing the criminogenic factor or factors. They include programs to encourage prisoners to re-think the impact of crime upon their victims and to develop more empathy and become less impulsive, and to develop better decision-making skills (cognitive skills program). Other offending behaviour programs are directed at aggression and anger (anger management program), offending sexual behaviour (sex offenders program) or drug and alcohol awareness (substance abuse program).

In Queensland, correctional centre guidelines assist staff in determining how they will manage the considerable demands of the offending behaviour, education and VET programs, and waiting lists for all programs. In Queensland prisons, offending behaviour programs, literacy and short entry-level VET programs are available to prisoners who are on remand or who are serving sentences of fewer than 12 months. However, sentenced prisoners who are high-risk, female and Indigenous prisoners receive access to mainstream programs even if their sentence is fewer than 12 months. Indigenous-specific programs include literacy and numeracy, work readiness and Murri Art.

Methodology

Both quantitative and qualitative methodologies were used in this study. The quantitative methods involved a series of cross-tabulations and logistic regression analyses to investigate corrections databases that provided records of prisoner characteristics, VET program attendance, and evidence of re-entry back into the custodial system. The initial sample of former prisoners consisted of 6021 individuals who were released from prisons in Queensland between 1 July 2001 and 30 November 2002. Individuals who had been released to community custody, escaped from custody, and released on the basis of upheld appeals were then excluded. The initial sample of individuals was assessed for evidence of re-offending between the date of their release and the final census date for these analyses, which was 30 November 2004. Evidence of re-offending was drawn from information about returns to custody and/or returns to community supervision during the census period. A ‘return to custody’ was recorded for those people who returned at least once to a prison sentence during the census period; this definition excluded non-sentenced individuals, people returning from community custody, and those returning from post-prison supervision orders. For this analysis, recidivism was defined as only those individuals who returned to custody during the census period. This group included 1810 individuals (30.1% of the initial sample). Logistic regression tested statistically the links between involvement in VET in prison and recidivism rates for different types of prisoners.

The qualitative methodology included data collection using semi-structured face-to-face interviews with individual respondents. On other occasions, within
the operational constraints of the prison, it was most efficient to complete interviews with small groups of staff (while prisoners were in lock-down or participating in programs), and with small groups of prisoners before or after a training program (groups varied in size from two to eight prisoners).

During September and October 2004, 145 interviews were completed with correctional staff and prisoners across seven correctional institutions in Queensland. The centres were chosen to be representative of the broad range of correctional institutions, including centres that reflected the full range of prisoner classifications, and provided access to both male and female offenders and to offenders of Indigenous backgrounds. Before the interviews, prisoners were informed that they had the right to refuse to be interviewed, that all information was strictly confidential with no names or identifying information attached to the interview notes, and that no person from Queensland Corrections saw any interview notes. The sub-groups of respondents that made up the interviews were:

- 50 Indigenous male and female offenders who were identified by program staff in the centres as being of Indigenous background and as accessing VET programs currently or in the past
- 60 non-Indigenous male and female prisoners in the same correctional centres
- 26 correctional staff (VET training officers, education officers, programs staff, correctional officers, sentence management staff, managers)
- five Department of Corrective Services staff managing or overseeing the VET programs
- four public and private registered training organisation staff who were in the centres delivering VET training.

Findings related to recidivism

The aim of the analyses of Queensland corrections databases was to investigate whether characteristics of prison offenders, including their involvement in VET programs, could be used to predict their risk of re-offending after their release from prison. For this analysis, the definition of recidivism included only those individuals who returned to custody in Queensland during the census period.

VET involvement

The characteristics of those who participated in any VET programs were compared with those who did not. Cross-tabulations indicated that VET program participants, relative to non-participants, are:

- no less likely to return to custody, but less likely to return to community supervision and less likely to return to the corrective system overall
- more likely to be female
- less likely to be of Aboriginal or Torres Strait Islander descent
more likely to have committed offences involving robbery and extortion, and less likely to have committed offences against good order
more likely to have sentences ranging from one year to ten years and less likely to have shorter or longer sentences
more likely to have higher levels of education
more likely to be involved in the Post-Release Employment Assistance Program and literacy/numeracy programs
younger on average.

Predicting return to custody
A number of factors were investigated in relation to individuals returning to custody. For each variable, the findings regarding significance are statistically controlled for the effect of other variables in the sample. The findings include the following.

- **Age** is a significant predictor, with older people being *less likely* to return to custody. On average, people who returned to the corrective system were five years younger than those who did not return.
- **Sex** is a significant predictor, with females being *less likely* to return to custody. Overall, 31% of males returned to custody, but only 26% of females returned.
- **Indigenous status** is a significant predictor, with Aboriginal and Torres Strait Islander people being *more likely* to return to custody. Overall, 25% of non-Indigenous offenders returned to custody, while 43% of Indigenous offenders returned.
- **Most serious offence grouping** is a significant predictor. People convicted of property offences or offences against good order appear more likely to return to custody. People convicted of robbery/extortion offences or drug offences appear less likely to return to custody.
- **Sentence length grouping** is a significant predictor. People with shorter initial sentences are more likely to return to custody than people with longer initial sentences.
- **Education grouping** is a significant predictor. In general, people with higher levels of education (especially Year 12 or above) are *less likely* to return to custody than people with lower levels of education. However, very low levels of education (that is, up to Year 7 only) are not associated with higher risk of return to custody.
- **Total Offender Risk Needs Inventory score** is a significant predictor, with people who score higher being *more likely* to return to custody. Overall, those who returned scored 3.5 points higher on the inventory than those who did not return.
- **Risk category** is a significant predictor, with people categorised as ‘high risk’ being *much more likely* to return to custody than those categorised as ‘low risk’.
VET before initial release is a significant predictor, with people involved in VET being less likely to return to custody. Overall, 32% of those who did not participate in VET before their initial release returned to custody, while only 23% of VET participants returned.

Literacy/numeracy before initial release is not a significant predictor, although there is some slight indication that participation in literacy/numeracy programs is associated with lower incidence of return to custody.

Post-Release Employment Assistance Program is not a significant predictor, although there is some slight indication that involvement in the program is associated with lower incidence of return to custody.

Factors facilitating the provision of VET in prisons

Education programs in correctional institutions focus upon improving literacy and numeracy through to assisting prisoners with access to higher-level qualifications, such as VET diplomas and university degrees. VET programs can be completed within the prison or through distance learning. These programs in Queensland prisons in 2004 included certificates in Aboriginal and Torres Strait Islander visual arts, outdoor power tools, business, computer-aided drafting, engineering, first aid, furnishing, hospitality, transport and distribution, and workplace preparation and practices. A number of centres are planning to introduce various certificate III qualifications from 2005 and target computing and hospitality training for female prisoners. This is an indication that the demands of the labour market, as well as those of offenders, are driving developments of VET in prison.

Queensland correctional centres report completion rates of 80% or better for VET modules. A number of specific procedures and action strategies are seen to be behind these high completion rates. The risk assessment and related initial sentence management plan for each prisoner are being used very explicitly to determine offending behaviour and educational and VET program needs of offenders. The six-monthly sentence management reviews provide updates on prisoner progress and, where applicable, reasons for dropping out from programs. Innovative delivery using a module-by-module approach and dedicated training workshops are adopted, and the promotion of employment opportunities available from training is also believed to contribute to the success. Also of significance is the active promotion of prisoner achievements and factors facilitating participation and completion of VET modules by prisoners.

Module-by-module approach

Various industry training packages being used to deliver units of competency were typically taken from certificate I or II qualifications. They were popular among both Indigenous and non-Indigenous offenders. However, Indigenous offenders also accessed an accredited program in Indigenous art. Overall, the most frequently accessed units of competency were for first aid, followed by units of competency from certificates in engineering, business, horticulture, and
information technology. Within the centres, prisoners and corrections staff talked about these units as modules. In addition, there was widespread advertising of forthcoming VET modules in the residential and secure units in centres. In one centre, this promotion was tied to an ‘education expo’ in which registered training organisations and universities offering training gave presentations about VET, traineeships and apprenticeships, and distance learning. Other centres used an education induction program which oriented new prisoners to the purpose and availability of VET and other education programs. Where they had libraries, materials about VET and other programs were also made available. Programs were also being promoted to custodial officers more actively than in the past.

VET modules were especially suited to prisoners’ learning styles because they allowed a more hands-on approach to learning, and the benefits were normally immediately recognisable. Prisoners who had successfully completed earlier modules in the qualification were actively followed up, and were advised of forthcoming training programs. Interviews with prisoners were used to check their motivations for wanting to undertake the training, as well as to clarify the centre’s expectations. Courses were promoted as being a privilege that needed to be taken seriously, with the implication that dropping out for unjustified reasons would affect their access to other VET courses. In some centres, the prisoners signed a ‘psychological contract’ in which they indicated that they understood the attendance requirements for completing a specific course. Daily attendance rolls were taken, and prisoners who did not attend were sought out and asked to give reasons for non-attendance. Some VET officers also talked about ‘picking the eyes out of the waiting lists’ to give preference to those who were coming up for release or parole. This was to give every advantage to prisoners who were coming up for a hearing at the Parole Board.

VET modules were organised in innovative ways and were run to minimise disruption to prison work (for example, laundries, kitchens, and commercial workshops) or attendance at offending behaviour programs (for example, cognitive skills, drug and alcohol addiction, sex offender behaviours, and anger management). Prisoner interest and motivation was maintained by running VET modules compactly (often for three-hour sessions for five days per week). Furthermore, new policies were being applied which allowed prisoners to be absent from prison work for two sessions a week.

Access to training workshops
The establishment of dedicated training workshops by centres was a major facilitator of VET programs. These separate workshops were generally well equipped, and importantly, were not driven by the need to meet production targets and deadlines like the commercial workshops. Like the commercial workshops, however, there were limits to the number of pieces of equipment available for prisoners to use (for example, computers, welding appliances). Prison policy also prescribes limits to the maximum number of prisoners allocated to a workshop or educational area for the safety of prison staff and outside trainers. These polices, in turn, resulted in smaller-size classes than in ‘outside’ training environments, but unfortunately long waiting lists of two to
four months for a number of the most popular VET programs in the prisons (that is, first aid, computer studies, forklift operator, landscaping, welding, Year 10 studies, and tertiary preparation).

Improved employment opportunities from training
Prisoners believed that VET training had improved their self-confidence and raised levels of self-esteem. In the context of a history of failing to attend and complete their education at school, they were proud to have successfully completed a VET course. Custodial officers, as well as program staff, mentioned that this had resulted in improved prisoner behaviour back in the units.

Prisoners believed that their involvement in VET training would increase the range of jobs they could access upon release. In turn, having a job was critical to their re-integration back into their communities and families. Female prisoners, in particular, talked about the advantages of assisting their children now they knew more about computers, or how the completion of qualifications like small engine or hospitality or kitchen duties would help them to be more confident at home. Asked about the jobs that they would now access, male prisoners who had undertaken VET mentioned most often that they wanted to work as welders, forklift operators, plant operators, construction workers, and in landscaping. The majority of male and female prisoners wanted to be self-employed. They believed that running their own business would allow them to escape the stigma faced by ex-prisoners seeking employment.

As well as gaining useful technical skills, prisoners and staff believed that VET programs developed more generic skills. In the training workshops, prisoners had to learn to interact with prisoners they did not know. Prisoners believed that the training sessions improved their general communication and time management skills, as well as planning, organising and decision-making skills. They also became more aware of the issues involved in working as part of a successful team.

Promotion of offender achievements
The most obvious motivating factor among prisoners was the sense of achievement gained in developing a new skill. In contrast to their many learning experiences at school, they were able to successfully complete their courses. They also felt that they had received a high standard of training from very knowledgeable and accommodating trainers. They were aware that, in undertaking training, they would have to pay for similar training programs on the outside, and that the course was broadening the range of jobs they might be able to access upon release.

Staff in correctional centres, especially VET and education officers, took considerable care in recognising the achievements of students who completed a module or a full qualification. Module completers were provided with the official record of their achievement from the registered training organisation, which had been funded to resource the training, and graduation ceremonies were held to recognise the achievements of prisoners who had completed a qualification.
Centres had adopted a policy of keeping copies of this documentation in prisoner education files so that prisoners had replacement copies if required. These files were especially useful for prisoners who re-offended and were re-incarcerated. In these cases, files had copies of certificates that prisoners may have lost after release.

The prisoners undertaking VET programs believed that they were a minority in the prison. The majority of prisoners completed ‘offending behaviour’ programs only, and they were the only programs seen to increase their chances of parole. These prisoners commented that they were not willing to work with the system. As reported a number of times, many prisoners consider the system which has placed them in prison as unfair, and thus they are unwilling to help the system. VET and education officers who were interviewed had opinions that were very similar to those of the prisoners who were undertaking VET. That is that, the correctional system was more focused upon managing and correcting the offending behaviour than on preparing prisoners for employment upon release.

Positive prisoner perceptions of VET staff and trainers
Trainers were seen to be supportive and not patronising of learners. Other prisoners encouraged their peers in the training workshops. Across the prisons visited, no prisoner was unhappy with the quality of tuition they had received. In particular, they reported being treated with respect by the trainers who were perceived to be very creative and accommodating in setting up tasks for learners at different levels of confidence and skill.

There was a great deal of evidence that VET staff, education staff and outside trainers were communicating well with one another and working together to assist prisoners. For example, a prisoner might enrol in a VET program that demanded a higher level of literacy and numeracy (for example, computing). The VET officer and trainer would soon become aware of these learning problems. In these cases, prisoners could either access a literacy and numeracy class at the same time as the VET program, or seek one-on-one literacy and numeracy tutoring. VET officers reported that the behaviour of individual prisoners with these learning and comprehension difficulties improved considerably once they were able to keep up with other learners. Correctional officers also reported upon the improved behaviour of such prisoners back in the units.

Factors hindering the provision of VET in prisons
The need for prisoners to complete ‘offending behaviour programs’ and to participate in prison work were key obstacles to their participation and completion of VET programs. In some prisons, traditional concepts of the custodial role of prisons also limited opportunities for prisoners to engage in VET. Other inhibitors included short sentences, transfers, early releases, and limited availability of skilled external trainers.
The need to complete offending behaviour programs

Offending behaviour programs targeted criminogenic needs—psychological, cognitive and behavioural factors at the core of an individual's criminal behaviour. These programs include the cognitive skills programs, drug and alcohol programs and sex offender programs. They are either court-ordered or are determined upon incarceration. The Offender Risk Needs Assessment Inventory is completed in interviews with offenders by psychologists and sentence management staff. Prisoners are very aware that the completion of such programs will be viewed positively by individuals who make key decisions about prisoner progress through the corrections system, including eligibility for parole and reclassification to lower levels of security. Indeed, in many cases offenders choose to repeat such programs, hoping to prove to sentence management and parole boards that they are actively dealing with their offending behaviour.

Involvement in prison work

The next priority for offenders was to work in prison kitchens, laundries, gardens, and farms or commercial workshops. This also reduced training program participation and completion. In Queensland commercial workshops provided opportunities for prisoners to practise a specific set of skills (for example, stainless steel work, woodwork, paint and powder coating, textile cutting, light fabrication and tailoring) and engage in paid work. However, the primary motive for this involvement was to earn money.

In some institutions, training programs and prison work were scheduled at different times of the day. If programs were scheduled in the morning, the afternoon was devoted to prison work. Offending behaviour programs for higher-security prisoners, for example, were also scheduled so as not to conflict with VET programs or prison work. Protection and mainstream prisoners are forbidden from being in the same accommodation areas or on training programs. These issues also have to be taken into account in the planning and management of training sessions. However, not all centres paid the same attention to reducing potential clashes between attendance at VET programs and involvement in workshops and prison work.

The custodial culture versus a training culture

In some centres, there was still the old divide between educators, custodial staff and the traditional custodial officer—where that culture still existed. ‘Prisons are for corrections, not for education and training’, said one custodial officer. Another also responded, ‘I have no idea what VET staff do all day and I don’t really care’. Nevertheless, VET was working best in meeting the training needs of prisoners where the old divide between custodial officers and programs staff had long gone. Here staff worked in teams and shared information and insights about the personal, educational and training needs of individual prisoners. While concerns for prisoner and staff safety were still paramount in these
environments, there was a level of tolerance and flexibility shown by custodial officers. This allowed VET and education programs to operate more effectively.

An example of this flexibility can be seen in the way compulsory musters, which occurred during the day, were dealt with in the centres. Traditionally, if the prisoner count is not accurate, it is taken again, and if is still not correct (that is, a prisoner appears to be missing), the prison goes into lock-down. All prisoners return to their cells, and all activities cease. In centres where custodial and programs staff operate as part of a larger team, good communication between custodial officers and training staff allows musters to continue safely and securely, but are also sufficiently flexible to ensure that training workshops are not disrupted for long periods of time. In such institutions, flexible and innovative approaches to the timetabling of programs and competing prison work are supported by good communication between custodial officers and program staff and promote access to and provision of VET.

Transfers or release from prison
The uncertainty of prisoners remaining in the centre providing the training, combined with the inability of training staff to predict prisoner movement, also inhibited the completion of the training qualifications. In many ways, the module-by-module approach being adopted in prisons reflected the reality of being unable to predict prisoner movements. Corrections staff report that the adoption of the module-by-module approach was due to wide range of factors, and in particular, prisoner movements, the nature of the training packages, and the fact that the majority of prisoners are serving short sentences (fewer than 12 months). Prisoners are moved without much warning across centres for a variety of operational reasons. These can include over-crowding, unit closures, security concerns for protected prisoners, prisoner reclassification to lower security levels, and addressing specific personal requirements (for example, to be located closer to family). A decision of the parole board may also mean that prisoners are released early.

Difficulties in accessing skilled external trainers
At present a major challenge for centres is the difficulty in finding staff who are willing to work at the pay levels set by the providers. In an environment characterised by booming housing and construction industries, the contracted casual trainers, who are often employed to provide training for these industry areas in prison, have been lured away to higher-paying work in the private sector. Hourly pay rates for welders, large machine operators, and construction workers are two to three times the rates offered by technical and further education (TAFE) institutes or private providers. In some cases, VET courses are financed by non-VET funds to secure the services of private operators who are qualified operators and trainers. Two trainers are required to be present to conduct workplace assessments. One is required to supervise prisoners, as the other works with individual prisoners completing assessment tasks. In other
cases, where the cost or lack of a suitable trainer prevented prisoners from accessing face-to-face training, the VET officer arranged for the VET provider to deliver programs via distance learning.

Conclusions

There is growing evidence that, across Australia, correctional systems are building a ‘throughcare’ philosophy in which an integrated program of rehabilitation, education and training is emerging. The significant evidence to emerge from our analyses to support a more integrated program which develops employment skills is that offenders involved in VET were less likely to return to the corrective system. On average, being involved in VET before initial release was associated with a decrease in the chance of returning to custody (overall, a reduction from 32% to 23% in the recidivism rate). These findings are very significant and approximate the findings of the United States Three-state recidivism study (Steurer, Smith & Tracy 2001), which is regarded as the most comprehensive and scientific study made on correctional education and training to date.

The more obvious developments towards an integrated program of rehabilitation, education and training in this Queensland study included the provision of pre-release/transition and employment programs, the opportunity for prisoners to be involved in meaningful prison work, the expansion of vocational training into new areas, and more access to advice about health services, education, training and housing, prior to release.

The availability of and access to dedicated training workshops in correctional centres, as well as to outside trainers and tutors who were highly professional and respectful of prisoner needs, further supports the emergence of a ‘throughcare’ approach to prisoner management. In this research, we found highly motivated offenders engaging in and completing multiple VET programs, which were providing them with technical skills and which also improved their confidence and self-esteem and contributed to broader sets of generic skills. Importantly, the majority of male and female prisoners expressed a desire to be self-employed in order to escape the stigma faced by ex-prisoners when seeking employment.

Staff in correctional centres, especially VET and education officers, took considerable care to recognise the achievements of students who completed a module or a full qualification. Interviewed prisoners were very positive about the role that prison staff and trainers were playing in assisting them to develop skills to help them to re-integrate into the community upon release.

Prisoners are faced with managing the demands and constraints of two systems—the corrective services system and the system of vocational education and training—which have similar, but also different objectives. Prisoners are attempting to meet their educational and training needs within corrective systems that are still geared primarily, and understandably, to the safe and
humane management of offenders while in correctional facilities. Fewer people and financial resources are focused upon the transition management of prisoners on release back into the community.

Such barriers need to be identified and resolved. In particular, correctional institutions need to be funded not only to achieve custodial objectives and provide advice to sentencing and releasing authorities, but also according to their achievements in the area of rehabilitation, adjustment and employment upon release. This will require patience, time and planning, as well as continued cultural and structural change. The introduction of better systems and evaluation mechanisms is also required.

References